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Washington Irked By Israel's Delay On Beirut Pullout

By Bernard Gwertzman

New York Times Service

WASHINGTON — Despite Israel's consent to the landing of U.S., Italian and French forces in Beirut, Reagan administration officials have expressed irritation at Israel's seeming refusal to agree to President Ronald Reagan's demand for an immediate withdrawal of its troops from the Lebanese capital.

Israel's rejection of an investigation into the Beirut massacre of Palestinians has surprised Washington as well, lessening the possibility of projected increases in U.S. aid.

The State Department said that plans for the landing of the three-nation force later this week were going ahead following the decision of the Israeli cabinet Tuesday to accept the re-entry of the troops.

But White House and State Department officials said that the administration remained concerned that the Israelis had avoided giving a clear-cut statement on when Israeli forces would be withdrawn.

Mr. Reagan has repeatedly insisted on an immediate pullout of the Israelis and, in his statement on Monday, said that for the three-nation force to succeed, "it is essential that Israel withdraw from Lebanon."

"Our position is clear," John Hughes, the State Department spokesman, said Tuesday. "We are calling for an immediate withdrawal of Israel."

Another State Department official said that Secretary of State George P. Shultz had demanded on Saturday a "prompt and positive" response from the Israelis to the request that they withdraw immediately.

"We still have not gotten that answer," the official said.

The Israelis have said that they would gradually turn over their positions in West Beirut, which they took up last week, to the Lebanese Army, and Defense Minister Ariel Sharon had said prior to the massacre of Palestinians in West Beirut that this could take a matter of weeks.

Mr. Hughes said that there seemed to be a "drawing down of Israeli troops" in West Beirut, "but we are not aware that any Israeli unit has been withdrawn."

That is what we are asking for and want to see."

But Mr. Hughes said that the approval given by the Israeli cabinet for the three-nation force to land was enough for planning to

go ahead for the landing of the troops as early as Friday.

Between 800 and 1,000 U.S. marines are expected to take up positions in Beirut, along with French and Italian units. Defense Secretary Caspar W. Weinberger insisted Tuesday that the marines would not be a police force and would be withdrawn if they faced combat.

Secretary Shultz, appearing on a television program Tuesday, noted that it was impossible to say how long it would take to realize the force's objective, which is "to help the government of Lebanon create stability and govern in the city of Beirut."

"So I think it is a mistake to set yourself up right now and say, as of some date we're going to leave, because the situation may not be propitious at that moment," he said.

The marines sent last month to supervise the withdrawal of Palestinian Liberation Organization and Syrian forces from West Beirut had been given a 30-day limit by Mr. Reagan, but were withdrawn after only 16 days.

Mr. Shultz, asked if he agreed with those who said that the three-nation force should have stayed longer and thereby prevented the massacre of the Palestinians, said he did not because the conditions for the troops' deployment had been met "and so we left, and I think properly so."

Because of known Soviet concern over the introduction of American forces to the area, Ambassador Anatoly F. Dobrynin of the Soviet Union was called to the State Department, officials said, to receive a briefing from Lawrence S. Eagleburger, the undersecretary of state for political affairs. The ambassador was assured that the troops were being sent at the request of the Lebanese government and would be withdrawn when stability returned to Lebanon.

Effect on Aid

The Israeli cabinet's decision against a special inquiry into the Beirut massacre apparently has dimmed prospects for previously proposed increases in U.S. aid.

With the Jerusalem press reporting that Israeli cabinet officials and senior military officers knew of the Beirut killings 24 hours before they were halted, "Israel ought to be willing to submit this matter to an international investigation and adjudication," asserted Senator Henry M. Jackson, Democrat of Washington. "This goes to the credibility of Israel's ability to deal with the problem in Lebanon and its standing as a member in the family of nations."

For the moment, the mood of disapproval and disenchantment with the Begin government has not reached the point where congressional leaders favor cutting off aid. But influential members assert that hopes are virtually dead for aid increases; the administration had sought last spring and that the best Israel could hope for now would be to have the 1982 level of \$1.3 billion in military aid and \$785 million in economic aid continue into 1983.



Ariel Sharon, Israel's defense minister, defended government policies in Lebanon during a debate in parliament Wednesday.

Israel Giving Arms Seized in Beirut To Forces Implicated in Massacre

By Loren Jenkins

Washington Post Service

BEIRUT — Heavy weapons captured by the Israeli Army in its invasion of West Beirut are being turned over to Christian militia forces whose units have been implicated in the massacre of Palestinian civilians in the capital's Chatila refugee camp.

Lieutenant Colonel Yaacov Perez, the deputy spokesman for the Israeli Army in Beirut, said Wednesday that many of the weapons its forces had seized there were being turned over to the Lebanese Forces, an organization of rightist Christian militias. Israeli officials have admitted that members of that group participated in the massacre last week.

The spokesman said that the weapons being turned over were part of a "gigantic" supply of weapons and munitions that the Israelis had picked up from 130 arms caches around Beirut since its occupation of the city last week. Some of the arms, he said, belonged to the now-evacuated Palestinian Liberation Organization, and some to leftist Lebanese Muslim militias who tried to resist the Israeli advance into West Beirut.

Colonel Perez said that the army was transporting about half of the captured weapons south to Israel, even though the provisions of the evacuation accords negotiated last month by Philip C. Habib, the special U.S. envoy, dictated that all PLO heavy arms were to be turned over to the Lebanese Army.

The colonel said that of the weapons the Israeli Army was not going to take to Israel, part would go to the Lebanese Army while

many more were being given to the Lebanese Forces.

"The fact is we have found so many munitions, so many weapons that we cannot carry them all back to Israel," Colonel Perez said. "We have even found tanks and we have turned them over to the Lebanese Forces and they are happy with them. They say they are going to use them."

The Israeli spokesman also added new details about the Israeli involvement with the militia groups that entered the Chatila camp last week, when the nearby Sabra camp was also invaded.

The Christian forces "were only supposed to look through the camp and kill PLO terrorists," he said. "We didn't expect them to kill civilians."

Colonel Perez said that after the Christian militiamen had been brought to the assembly area just south of the entrance to the Chatila camp, the Lebanese Forces "chief officer," whom he did not name, had given his men the order "not to touch women and children" within hearing distance of Israeli Army officers.

"But when they went in, they did just that," the Israeli military spokesman said. "We didn't have any control over them. We didn't know it was going to be a massacre."

The International Red Cross reported that as of Wednesday afternoon, 293 bodies had been recovered from the alleys and bulldozed homes of the camp where once 10,000 refugees lived.

Sharon Admits Israeli Army Aided Beirut Raid Planning

The Associated Press

JERUSALEM — Defense Minister Ariel Sharon admitted for the first time Wednesday that the Israeli Army had helped plan and support a Christian militia raid against Palestinian guerrillas in Beirut refugee camps. But he said Israel had never imagined that hundreds would be massacred.

Prime Minister Menachem Begin's government later defeated a call by the opposition for a formal inquiry into the massacre. The motion was defeated by a 48-42 vote, but the government promised to conduct an investigation into the slaughter of hundreds of Palestinian refugees in West Beirut last week.

As the political uproar over the refugee camp killings heightened, Energy Minister Yitzhak Berman said he had submitted his resignation in protest, as did Menachem Milson, the civilian governor of the occupied West Bank.

Mr. Sharon, speaking during parliamentary debate on the killings, said, "We didn't know exactly what was going on, and to this day we don't know exactly, because when it happened, our forces

were under strict orders not to go into the camp."

He added that the Christian Phalangist militia refused to speak about the killings with Israeli officers. The militia has denied involvement in the massacre at the Sabra and Chatila refugee camps.

Mr. Sharon said the Phalangists were allowed into the camps after they guaranteed that they would "not harm civilians, especially old people, women and children." Various estimates of the number of victims ranged from 300 to 1,400 — many of them women and children.

Legislators repeatedly interrupted Mr. Sharon's speech with angry shouts, and demonstrators waving placards were evicted from the parliament gallery during the bitter debate.

Shimon Peres, the Labor Party leader, accused the government of issuing a string of "concealed facts, inaccuracies and half-truths" in its earlier accounts of the massacre.

"Mr. Prime Minister, Mr. Defense Minister, whose stupid idea was it to send the Phalangists into the camps?" he asked. He called

for ministers responsible to resign.

Mr. Berman and another parliamentary member of Mr. Begin's coalition, Dror Zeigerman, voted for an independent inquiry.

Mr. Begin averted defeat on the motion for a formal inquiry by compromising with the National Religious Party and the TAMI faction, two coalition partners threatening to vote against him if no investigation were set up.

Justice Minister Moshe Nissim outlined the compromise. He told the legislators the government would "in the very near future take the appropriate decision" on what sort of investigation to conduct.

The coalition survived an earlier vote Wednesday on Labor's motion condemning the Israeli entry into West Beirut last week, which the government said was an effort to avert further bloodshed after the assassination of President-elect Bashir Gemayel, leader of the Phalangist militia. The vote on the motion was 47-40.

■ Reports on Beirut Embassies

Workers at the Algerian and Iranian embassies in West Beirut reported Wednesday that Israeli soldiers had entered the embassies.



Yitzhak Berman after he quit Israel's cabinet Wednesday.

shot open safes and carted off files, the AP reported. Another report reported seeing Israeli troops at the Libyan Embassy. A man at the Algerian Embassy (Continued on Page 2, Col. 6)

Italy Seeking Return Of Figure In Scandal

Reuters

BERN — Italy formally requested Wednesday the extradition from Switzerland of an industrialist and Masonic lodge official, Licio Gelli, the Swiss Justice Ministry said.

The Italian Embassy handed a note to the Swiss government asking for Mr. Gelli's extradition and stating that he was wanted in Italy on several charges, including fraud and fraudulent bankruptcy.

British Strikers Back Hospital Pay Demands

By R.W. Apple Jr.

New York Times Service

LONDON — Millions of British trade unionists staged strikes and rallies Wednesday in support of workers in the National Health Service who are seeking better wages.

Some union leaders said it was the biggest demonstration of labor solidarity since the General Strike of 1926.

INSIDE

■ No arms control breakthrough seems near, U.S. ambassadors to three different arms-control negotiations with the Soviet Union indicated to reporters after meeting President Reagan before returning to the bargaining table. Page 3.

■ Amid signs of mounting dissension among West Germany's Free Democrats, an opinion poll showed that their support had dwindled to only 23 percent of the electorate since they decided to quit Schmidt's government. Page 5.

■ A special supplement on Communications Technology looks at how the worldwide industry has moved into the competitive arena of practical applications. Page 75.

To Our Readers

Because of a strike in Britain, the Herald Tribune was unable to print its Wednesday editions in London. As a result, there was no distribution in Britain, Ireland, Malta, Oman and Qatar. We regret any inconvenience this may have caused. Regular distribution resumes with this issue.



Marchers in London, on what was declared the Day of Action, showed support Wednesday for health workers' pay demands.

the trade-union leaders in their hearts really believe that they have changed very much by their token stoppages today."

In London, more than 100,000 protesters marched on a marshaling area on the South Bank of the Thames to Hyde Park in brilliant autumnal sunshine, carrying banners proclaiming their support of nurses and other health workers. In the park, they heard speeches from trade union leaders and from Michael Foot, the leader of the Labor Party.

Since April, the government has been deadlocked in pay negotia-

tioning, on which most Britons depend for medical care.

More than 600,000 workers, including nurses, cooks, maintenance staff and clerks, are asking for an increase of 12 percent, which works out to slightly more than the rate of inflation since their last contract.

The government has offered 6 percent to some, 7.5 percent to others. Unlike many other workers involved in pay disputes, the health service employees have managed to win a measure of public sympathy because of a belief

U.S. Agrees to Ship Computer System to China

By Philip J. Hilt

Washington Post Service

WASHINGTON — The Reagan administration has reversed its policy and approved the shipment to China of a sophisticated computer system used in the United States for highly accurate simulation of missile flight for the military and

Sources say the Soviet Union will send a high-level diplomatic mission to China next month. Page 5.

the National Aeronautics and Space Administration.

The decision is controversial because the United States has halted computer shipments to the Soviet Union, even down to the level of a computer that plays chess.

Senator Jake Garn, a Utah Republican, believes that exports to both China and the Soviet Union

are dangerous. He is one of numerous sponsors of legislation to stop what Admiral Bobby R. Inman, a former deputy director of the Central Intelligence Agency, called "a hemorrhage of the country's technology."

The Commerce Department refused to comment on its approval of the shipment, except to say that trade with China had been greatly broadened over the last few years. However, there is still a prohibition on sending to China

"equipment and technology that could make a significant contribution to the design, development or manufacture of new weapons or delivery systems."

John Calmer, an official in NASA's guidance and control branch, said his agency used the same type and brand of computer being exported to "do design anal-

ysis and simulation of spacecraft control systems."

The computer involved is called a hybrid because it combines two kinds of systems. Hybrid computers are used in the United States mostly in simulations for problems in dynamic vehicles, for space and defense," Mr. Calmer said. But he added that it is possible that the hybrid could be used for other kinds of simulation, such as process control in complex chemical plants.

The first part of the \$5-million computer system has already been shipped to China. It is manufactured by Electronics Associates of West Long Branch, New Jersey.

The company has tried in previous years to get approval to sell the hybrid computer to China, but was turned down until the Reagan administration liberalized trade, according to a company spokesman.

China is accorded a status above all other communist countries in trade with the United States. But the Chinese, to get the equipment must say that it will be used for nonmilitary purposes. In this case the machinery is being shipped to Harbin Institute of Technology where the hybrid computer will be used in the institute's computer research department.

Electronics Associates says the system will be used for simulation of steel production, chemical processing and turbine dynamics.

In addition to Mr. Garn, Senators Paul Laxalt of Nevada and Mack Mattingly of Georgia, both Republicans, have also introduced bills to stop such technology sales. In the House of Representatives measures have been introduced by Representative Robin L. Beard Jr. of Tennessee and others.

Signs of Slave Labor on Pipeline Said to Grow

By Hobart Rowen

Washington Post Service

WASHINGTON — Defense Secretary Caspar W. Weinberger says that "in recent weeks the evidence has been mounting that the Soviet Union may be using slave labor to build its natural gas pipeline from Siberia to Western Europe."

In an address to a conference sponsored by the Center for Strategic Studies at Georgetown University, Mr. Weinberger said Tuesday that the "human rights" issue was perhaps "a compelling" reason for administration opposition to the pipeline.

Mr. Weinberger defended the administration's opposition to the pipeline. In answers to questions from the audience, Mr. Weinberger indicated there was little

Administration sources said later that Mr. Weinberger was not trying to send "a signal of intransigence."

Many Sources

Mr. Weinberger said the evidence on the use of slave labor came from many sources, including an "important human rights organization" in West Germany and a "number of Vietnamese groups concerned that their political dissidents may have been exported to Siberia to help build the pipeline."

"The evidence is not conclusive," he said. "I hasten to say that. But the available evidence is profoundly troubling and some have found it very persuasive."

He said the French and West German governments had promised to investigate the reports and that the United States was

involved in the pipeline project. Reuters reported from Moscow.

It said Mr. Weinberger's comments were irresponsible and added that, "If he needs a line to advance certain political aims, he does not hesitate to use it."

■ Talks Reportedly Sought

British officials said Wednesday that Britain wants the United States and four European allies to meet in New York next week to resolve the pipeline dispute. Reuters reported from London.

Foreign Secretary Francis Pym of Britain and senior ministers of Italy, France, West Germany and the Netherlands will be in New York then for a meeting of the United Nations General Assembly. Another opportunity would come, however, the next week when North Atlantic Treaty Organization foreign ministers meet.

Syria Views Gemayel As Flexible, Cautious Compared to Brother

By Henry Tanner
New York Times Service

DAMASCUS — Amin Gemayel, the new Lebanese president-elect, viewed here as more flexible and more moderate than his brother, at the same time more cautious and perhaps a weaker man.

Syrian officials had taken his election for granted almost from the moment of Bashir Gemayel's flight. They expect early consultations with him on relations between the two countries, and particularly on the circumstances under which Israeli and Syrian troops will eventually be withdrawn.

Syrian sources said that Amin Gemayel came to the presidency as indebted to Israel than his brother, and they believe that he is not likely to favor a peace treaty with Israel soon.

northern Israel as he did his brother.

Western diplomats say that Mr. Gemayel, being more in the traditional mold than his brother, is likely to try to maintain good relations with moderate Arab governments, particularly Saudi Arabia, whose financial aid in the reconstruction of Lebanon will be needed.

Mr. Gemayel, it is noted in Damascus, is starting out with a greater reservoir of good will among Lebanese Moslems and other Maronite Christian groups. His brother, as the military leader of the Phalangist militia, had opened a gulf of hatred between himself and the Moslems and also between himself and such Maronite leaders as Suleiman Franjeh and Camille Chamoun, both former presidents.

Amin Gemayel was elected with the support of most of the established Moslem leaders who had boycotted his brother's election. Unlike his brother, he had remained in contact with these leaders in recent years.

But his brother, once elected, excluded authority and personal leadership, and it seems now that Lebanon would have been willing to rally around him as a strong leader.

Diplomats in Damascus say that Bashir Gemayel could be ruthless both as a politician and as a military man. Amin Gemayel, it is felt, is an unknown quantity, and it is impossible to predict how he will act under pressure from Israel, from Syria or from the various Lebanese communities and clans.

It is thought doubtful, for instance, that he will have the personal authority necessary to dismantle Lebanon's dozen or so private armies, including his own Phalangists. His brother, who wanted to move quickly, had announced that he would insist on dissolving the militias.

The expectation among Western diplomats is that Mr. Gemayel will turn to Western countries — especially France, but also the United States and perhaps Italy — for military assistance and advisers to help in rebuilding the Lebanese Army and for political support against Israel and Syria.

The assassination of his brother and the massacre in the Palestinian refugee camps make it unlikely, it is thought in Damascus, that Prime Minister Menachem Begin will summon him to a meeting in Jerusalem.

South Korea Said To Cancel Order For Shock Prods

Washington Post Service

WASHINGTON — The South Korean government has canceled an order for 500 shock batons that had caused a dispute between the State and Commerce departments over the foreign policy implications of trade issues, administration sources confirmed Wednesday.

Despite the cancellation of the South Korean order, a review of export-control procedures is under way and has been given impetus by revelations that the Commerce Department approved the sale of 2,500 of the batons to South Africa in April.

The batons are about the same size as a policeman's nightstick and give a non-lethal but highly painful shock when a person is touched. Human rights advocates say the prods are often used for torture or are used indiscriminately to control crowds. Supporters of the sales argue that it is better to provide a non-lethal item that can be used instead of guns.

The Commerce Department had approved the South Korean order over the objections of the State Department, which cited continuing questions about human rights practices by the South Korean government. Final authority for approving export licenses rests with the Commerce Department.



Toufik Zayad, right, the Arab mayor of Nazareth and a Communist member of the Israeli parliament, reacted angrily to a speech on Wednesday by Ariel Sharon, the defense minister, opposing an investigation of the massacre in West Beirut.

Refugees Afraid 'We Will Be Next' Chatila's Neighbor Camp Pleads for Army Protection

By Loren Jenkins
Washington Post Service

BEIRUT — When the 17-year-old Palestinian schoolgirl appeared in an alleyway in West Beirut's Borge Barajni refugee camp, the first thing that struck the visitor was her prettiness: a soft, radiant face with large, limpid black eyes.

But when she began to speak, it was the terror, not the beauty, that riveted the attention.

"We live in fear here," said the girl, who will be called Fatma to protect her identity. Her eyes watery with suppressed tears, she said: "Everyone is nervous and afraid. There is a great fear that after Chatila, we will be next."

Chatila is the Palestinian refugee camp to the northwest of Borge Barajni. Christian militiamen massacred hundreds of Palestinians last week at Chatila, within a few hundred yards of the Israeli occupation army's command center.

Not even President Ronald Reagan's announcement Monday that a new multinational peace-keeping force will be sent to Beirut has done much to still the terror of the people of Borge Barajni. They are terrified that before the force can be deployed later this week the militiamen who killed their friends and neighbors in Chatila and in Sabra refugee camp may try to do the same here.

Camp Is Unprotected

There are good reasons for their fears. The Borge Barajni camp, on the southern fringe of Moslem West Beirut, has been disarmed, and it remains unprotected either by the Lebanese Army or by the Israelis, who already are winding down their occupation and beginning to withdraw from the city they invaded last week.

The Lebanese Army is supposed to be protecting Borge Barajni, which bore the brunt of Israeli ar-

tillery, gunboat and aerial bombardment during the 10-week siege of West Beirut. The army was supposed to provide for the camp's security and that of all West Beirut under the terms of the agreement negotiated by Philip C. Habib, U.S. envoy to the Middle East, which led to the evacuation of the fighters of the Palestine Liberation Organization.

But the Lebanese Army, weak, demoralized and insecure, has balked at the assignment. It entered the camp two weeks ago to search for guns and ammunition left behind by the PLO, but left almost as quickly as it had come, leaving behind only roadblocks north and south of the camp, manned by half a dozen soldiers.

The Israeli occupation of West Beirut sent the camp into a frenzy of apprehension. "We have gone to the army, maybe 100 times, to ask them to come in here and defend us," said a Palestinian woman. "All they did was ignore us."

On Saturday, when word had already swept through the camp about the massacre at Chatila, the army did appear in the camp to ask all its residents to take any weapons they might still have to a nearby mosque for collection so the Israelis and the Christian militias would have no excuse to invade the camp.

"They said everyone would turn over their weapons," Fatma recalled. "Everything went all right and they would protect us from the Israelis and Haddad's men," a reference to Major Saad Haddad, a former Lebanese Army officer and leader of a rightist Christian militia.

According to dozens of Palestinians, hundreds of guns were turned over to the Lebanese Army. "We are not from the PLO, but we have always had weapons to defend ourselves," said an 18-year-old youth. "But we wanted army protection, so we took the guns we had always kept to defend our families to the mosque, and the army took them away."

After disarming the residents, the Lebanese Army left the camp as it was before, defended by the soldiers at the roadblocks and three-man patrols through the streets once or twice a day.

"We begged them to protect us," Fatma said. "They said they couldn't fight Saad Haddad, they were not strong enough."

Disarmed and alone, the Palestinians of Borge Barajni, a camp of 10,451 registered refugees of families who fled Palestine in 1948 when the state of Israel was created, have the look of a hunted people.

Reports From Chatila

Many have gone to Chatila, where several hundred bodies have been recovered, and returned to their camp to add to the terror with their reports of the carnage. Some have come back with exaggerated tales, others with more accurate ones. All know that an unspeakable horror has come to those near them and fear that it could come to them.

What do people do when they come back from Chatila? Fatma's father was asked. "They just come back and cry," said the father of 10, who has lived in Borge Barajni since fleeing his village near Acre when Israel was born.

At night, so great are the terrors that most people leave their homes and sleep away from the camp in neighboring residential districts, using garages, fields and cars as hiding places.

"Why do we live here?" Fatma asked. "We are not wanted. We are treated as if we are not people. Who says hello to us? Nobody." She says when they are frightened they cannot seek refuge in the heart of town because "we are Palestinians."

Her father asked quietly, "We want to go away from here, but where can we go? I don't understand why we are persecuted like this. Israel says the Nazis killed them. Now they are killing us like

Parliament Hears Sharon

(Continued from Page 1)

who would not give his name, showed reporters the ambassador's desk and said it had been pried open by Israelis on Sunday. At the Iranian Embassy, workers pointed out safes blown open with guns.

Both embassy buildings, as well as the nearby Libyan and Kuwaiti embassies, were heavily damaged by Israeli shelling of West Beirut during the Israeli siege. There apparently were no diplomatic personnel in any of the buildings after the Israelis drove into West Beirut last week.

The Algerian and Iranian governments have had close relations with the Palestine Liberation Organization. The Iraqis also have provided volunteers to fight beside Syrian troops in Lebanon in their confrontation with the Israelis.

Protests in Northern Israel Arab protests over the Beirut massacre flared in northern Israel Wednesday, the AP reported, and officials said at least 39 Israeli Arabs and 20 police officers were injured in clashes between demonstrators and police.

In Nazareth, the major Arab center in Israel's northern Galilee region, a spokesman for Holy Family Hospital said 13 Arabs, ranging in age from 13 to 41, were treated for a variety of injuries, 11 for gunshot wounds.

One patient, a 14-year-old boy shot in the abdomen, was transferred to Afula Hospital and was in serious condition, he said.

A spokesman at Nazareth Hospital said 26 Arabs, the youngest 10 years old, were treated there, and an unspecified number had gunshot wounds.

In the Israeli-occupied West Bank, Arabs closed shops and schools, and an AP photographer reported stone-throwing incidents in the major city of Nablus, where Palestinian youths have clashed with Israeli troops for three days.

Ghana's Borders Ordered Closed

Reuters

LONDON — Ghana temporarily closed its land borders to all travel Tuesday night to facilitate measures against black marketeering and other economically harmful activities, Accra radio said. It did not say how long the ban would last.

The ban on entering and leaving Ghana by land did not apply to sea and air journeys to and from the West African state, the radio said in a broadcast monitored here.

The measures were designed to check a drain on the national economy from smuggling and currency trafficking as well as black marketeering, according to an official government statement that the radio quoted.

Blind Halt Italian Trains

Reuters

PORTICI, Italy — Three hundred blind pensioners halted rail traffic between Naples and Sicily for two hours Wednesday by lying down on the track to protest the nonpayment of their state pensions, police said.

Chilean Doctor Denies He Identified Activists

Los Angeles Times Service

TORONTO — In an article by Stanley Meisler of the Los Angeles Times about a torture research center in Canada, a Chilean physician who now lives in Canada, Dr. José Venturelli, was reported to have "given [his] torturers, as they demanded, the names of peasants who were active politically."

This statement appears to have been based on a misunderstanding, Dr. Venturelli, who was interviewed for the story, now says he did identify one peasant on a list given him by his torturers, but only as a former patient, not as a political activist. (The story appeared Wednesday in the Inter-

Iraq Reports Bombing Iran Targets

LONDON — Iraq said its air force bombed Iranian military targets Wednesday and also flew spy missions over Tehran while Iran's military was conducting a parade in the capital's streets to celebrate the second anniversary of the beginning of the war.

Iraq's official news agency said Iraqi jets bombed Iranian military targets and troop concentrations in five Iranian towns near the southwestern border. Iran had no immediate word of the air attacks. But Iran's Islamic Republic News Agency said an Iraqi MiG-25 had been chased away by Iranian jets while "seeking to bomb residential areas in the capital."

The air raids and flights were a warning to the Iranian rulers that "Iraq is ready to deal a deadly blow to the enemy if they dare attack Iraq," a military communiqué said. The warning appeared to be in response to reports that Ayatollah Ruhollah Khomeini plans to order a fresh invasion of Iraq sometime this month.

Russia Denies Role in Pope Shooting

MOSCOW — Tass denied Wednesday that there was Soviet involvement in the May 1981 assassination attempt on Pope John Paul II, saying the report was like a "cheap detective story" invented by U.S. agents.

"They in Washington hoped to throw a stone at the Soviet Union; but they threw a boomerang," Tass said. The statement was made after the NBC television network broadcast a report that the Kremlin may have backed the assassination attempt because the pope supported the Solidarity trade union in Poland.

A Tass commentator, Yuri Kornilov, said "specialists in fabricating foul anti-Soviet sensations" apparently seized on the assassination attempt even though a Turkish rightist was convicted of shooting the pope. He said claims that Soviet agents, their Bulgarian assistants, revolvers and false passports all had a part in the plot were "absurd inventions."

Gandhi Urges Afghanistan Pullout

MOSCOW — Prime Minister Indira Gandhi of India said Wednesday that she has told Soviet leaders they should pull their troops out of Afghanistan "because we are against any type of interference."

But she said the issue was complicated by the flow of weapons from outside the country to the rebels who are fighting the Kabul regime. "There are two sides to the question or two sides to the problem," she said at a news conference after two days of meetings in the Kremlin with Soviet leaders, including President Leonid I. Brezhnev.

Suzuki Asks Government Pay Freeze

TOKYO — Prime Minister Zenko Suzuki appealed to government employees Wednesday to accept a pay freeze to help cut the deficit in the national budget. He also renewed his pledge to balance the budget by the 1984 fiscal year without raising taxes.

The government has already decided to eliminate a proposed pay rise of just under 5 percent for government workers this year. The decision led to a brief strike by transport workers, who halted bus and subway operations in seven cities Tuesday.

Mr. Suzuki also told the Chamber of Commerce and Industry that the cabinet would consider increased spending on public works and investment tax credits for small and medium businesses to help stimulate the economy.

Princess Grace Buried in Monaco

MONTE CARLO — Princess Grace has been buried in the Cathedral of Monaco in a private ceremony attended by her husband, Prince Rainier, two of her children and members of the former actress' family.

The interment of Princess Grace's body, which had been lying in state in the cathedral since funeral services Saturday, took place Tuesday in the underground crypt of the cathedral, where other members of Monaco's royal Grimaldi family also are buried.

The burial originally was expected to be Saturday after the funeral services. But at Prince Rainier's request, the crypt was modified so that after his death his body will lie next to that of his wife of 26 years.

Honduras Guerrillas Reduce Demands

SAN PEDRO SULA, Honduras — Leftist guerrillas are holding two Cabinet ministers and 79 businessmen after releasing one of their hostages Wednesday and reducing their demands for ending the five-day siege, officials said.

Amílcar Santamaría, a spokesman for President Roberto Suazo Cordova, said the eight heavily armed members of the Cinchonero Popular Liberation Movement had dropped their demands that the country's anti-terrorism law be repealed and that U.S. military advisers be ordered out of Honduras.

Officials identified the hostage released Wednesday as Danilo Valencia, a former Red Cross volunteer. They said Mr. Valencia was apparently freed because of his connection to the relief agency, which has been delivering food to the Chamber of Commerce building since the start of the occupation.

Magazine Says Egypt Has Jailed 180

CAIRO — The authorities have arrested 180 Moslem militants in a new crackdown on remnants of an underground extremist organization held responsible for the assassination of President Anwar Sadat, a weekly magazine said Wednesday.

Government sources had earlier put the number of detainees at 58, but they had indicated that arrests were continuing. An official announcement last week said the newly arrested group plotted attacks on several Cairo jails to free imprisoned colleagues as a prelude to assassinations and acts of sabotage aimed at overthrowing the regime of President Hosni Mubarak.

An article in the weekly Al-Mussawwar, known for close connections with the government, said the Jihad organization had received financial assistance from the Jordan-based Islamic Tahir, or Liberation Party, a group with extremist views and terrorist methods.

Dutch Plan to Stop Ocean Dumping

THE HAGUE — The Dutch government plans to halt ocean dumping of radioactive waste this year, the Ministry of Public Health and Environment said Wednesday.

Ineke Lambers, deputy minister, has decided to make September's ocean dumping in the East Atlantic the last and develop a land disposal site instead, according to a spokesman, Wiltje de Back. "The solution will be to store on land; the problem is to find a place," said Mr. De Back. He added that municipal approval would be necessary.

Protests against the dumping intensified this summer when Greenpeace, an international environmental organization, carried out sea maneuvers to interrupt Dutch ocean-dumping operations.

Compiled From Agency Dispatches

Arab Group Disagrees On Response to Killings

Reuters

TUNIS — Arab foreign ministers meeting in an emergency session failed to agree Wednesday on concrete steps to take in response to the massacre of Palestinian refugees in Beirut.

The ministers did decide, however, on a collective protest by Arab ambassadors to Washington and a warning that U.S. persistence in "supporting Israel's war machine" could only undermine the credibility of its policy.

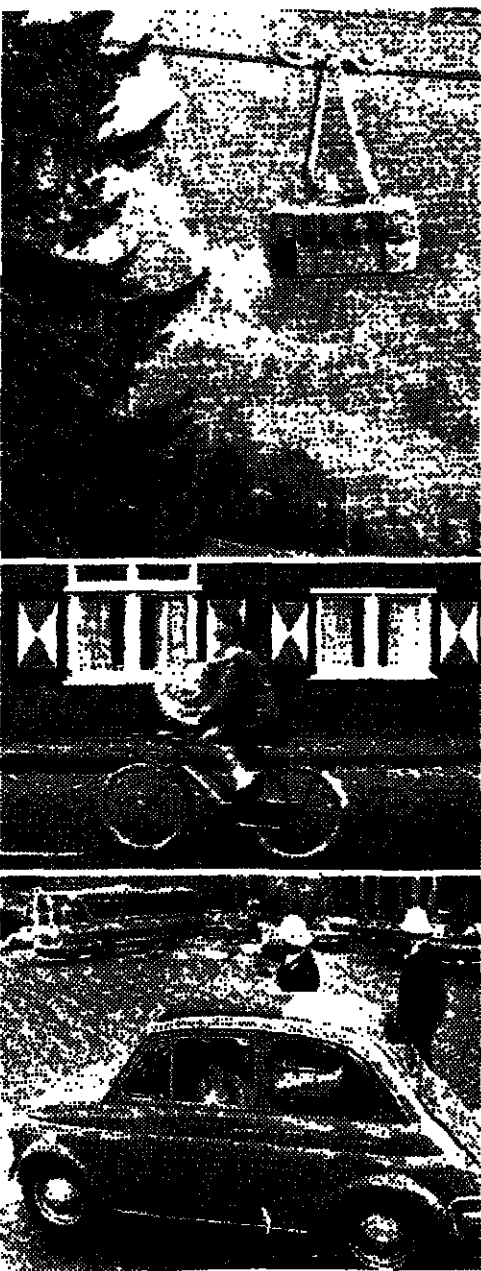
Both Libya and Syria rejected the final resolution, issued Wednesday afternoon.

Apart from condemning the United States, the resolution said the ministers decided to give emergency aid to the Palestine Liberation Organization, supported Lebanon's call for a return of multinational forces to the Lebanese capital and announced that Sept. 17, the day when the massacre was reported to have begun, would be a day of mourning in the Arab world.

The ministers also decided to work for the exclusion of Israel from the United Nations. The representatives, who met in the special session overnight Tuesday and early Wednesday at the request of the PLO, said the massacre was only possible because of U.S. "material, moral, military and political support for Israel."

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Bell System

House Passes Order to End Rail Walkout

Law Will Take Effect With Reagan Signature

WASHINGTON — The House quickly gave final approval Wednesday to legislation ordering locomotive engineers to end a strike that officials say is costing the country up to \$1 billion a day.

After the 383-17 approval in the House, the joint resolution was to go to President Ronald Reagan for his signature. Larry M. Speakes, the deputy White House press secretary, said he hoped the legislation would reach the president by the end of the day, but he said he doubted that would be possible. The Senate approved the resolution by voice vote Tuesday night.

The legislation will become law immediately after it is signed, but it was not known how soon the trains would be rolling again. Union officials said they would order their members to obey the law.

Fourth Day

The strike by 26,000 members of the Brotherhood of Locomotive Engineers was in its fourth day Wednesday. The walkout has idled 10,000 other railroad workers, and Transportation Secretary Drew Lewis told Congress on Tuesday that up to 500,000 others in rail-dependent industries could be laid off within two weeks.

The walkout, which began at 12:01 A.M. Sunday at the expiration of a 60-day cooling-off period, involves a union demand that the engineers be guaranteed higher wages than other members of a train crew.

Mr. Lewis, in congressional hearings, hit hard on the strike's impact on the economy. He cited estimates that the shutdown, affecting nearly all of the nation's freight railroads as well as some commuter and Amtrak service, was costing the economy as much as \$1 billion a day.

The bill's approval by the Senate on Tuesday night was urged by leaders of both parties, including Senator Orrin G. Hatch, Republican of Utah, and Senator Edward M. Kennedy, Democrat of Massachusetts.

The measure was approved on a voice vote by the House Energy and Commerce Committee with little dissent before going to the full House for the vote.



President Ronald Reagan met Tuesday with three U.S. arms negotiators — from left, Paul Nitze of the negotiations on intermediate-range nuclear forces, Edward L. Rowley of the Strategic Arms Reduction Talks, and Richard Starr of the Mutual and Balanced Force Reduction Talks.

Reagan and Arms Negotiators Meet; No Sign of Breakthrough Is Given

By Michael Getler
Washington Post Service

WASHINGTON — U.S. representatives in three sets of arms-control negotiations with the Soviet Union met Tuesday with President Ronald Reagan before heading back to the bargaining table. But they gave reporters no indication that a breakthrough was near in any of the talks.

Edward L. Rowley, who heads the U.S. delegation to the Strategic Arms Reduction Talks, said, however, that Mr. Reagan seemed encouraged that Moscow was moving "rather briskly" in these discussions on limiting intercontinental-range missiles and bombers.

Mr. Rowley said the pace of those START talks, which began in Geneva in June, was "much more rapid" than the tempo of discussions in the early 1970s that led to the first strategic arms limitation treaty, which has expired.

Although Mr. Rowley declined to discuss details of the Soviet position, reliable sources say that Moscow has proposed a ceiling of 1,800 missiles and bombers in each

number of launchers — the silos where missiles are based — rather than the number of missiles. This means that many extra missiles could be built and stored elsewhere and that it would be difficult to limit the number of warheads on each missile.

Mr. Rowley said the United States has not yet introduced a series of so-called "confidence-building measures" at the talks. Those measures, which are designed to reduce the risk of atomic war, were announced by Mr. Reagan in West Berlin in June. Mr. Rowley said he was hoping to get further instructions on the introduction of those proposals within the next several weeks.

The START discussions are to resume in Geneva on Oct. 6. The two superpowers are also to resume talks in Geneva on Sept. 30 on limiting intermediate-range nuclear forces, which involve missiles and aircraft based in Europe. The 8-year-old Mutual and Balanced Force Reduction Talks between NATO and the Warsaw Pact are to begin a new round on Thursday in Vienna.

Also attending the meeting with the president were Paul Nitze, the negotiator at the talks on intermediate-range nuclear weapons, and Richard Starr, the chief delegate to the force-reduction negotiations. In a statement accompanying the meeting, Mr. Reagan said, "We are encouraged by the serious and businesslike conduct of these negotiations thus far."

Another is that the Russians have proposed limiting, only the

connections to the American High Speed Rail Corp., an American booster of the bullet train. Also, a subsidiary of the Japanese National Railway is conducting a \$1 million feasibility study in Florida, using a grant from a Japanese foundation.

The Japanese conducted a similar study concerning the Los Angeles-to-San Diego route, and Governor Edmund G. Brown Jr.'s administration and the California Legislature concluded that the Japanese had the only technology worthy of consideration.

Last month, the Legislature passed a bill to press ahead with development of the bullet train project by private industry.

That bill, passed without the usual committee hearings, exempted the project from environmental review. It also authorized issuance of \$1.25 billion in tax-exempt state revenue bonds for the \$2-billion train. Japanese investors are expected to put up \$500 million, with the remainder coming from investors who buy securities of the American High Speed Rail Corp.

Florida, although more deliberative in hearing proposals, may be following the same course.

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endorsed the Japanese technology, saying the Shinkansen bullet trains had shown themselves safe at speeds as fast as 160 mph since 1964.

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He said the German system costs no more than a bullet train, and offered the committee the prospect of a Tampa-Orlando run of 19 minutes, Orlando to Miami in 54. He conceded, however, that the system is now operational only in prototypes.

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Study Lists 'Weaknesses' of U.S. Spy Agencies

By David Hoffman and George Lardner Jr.
Washington Post Service

WASHINGTON — The House intelligence committee, brushing aside objections from the CIA and other U.S. intelligence agencies, has voted at a closed-door session to make public a staff report critical of the performance of those agencies in Central America in recent years.

The report, scheduled for release Wednesday, was heavily edited to tone down several criticisms and respond to complaints from some members of the committee. For example, the phrase "rightist violence" was changed to "terrorist violence" several times in reference to the weakness of reporting on rightist violence from El Salvador.

A draft copy, reflecting the editing, was obtained by The Washington Post.

The study was commissioned

months ago by Representative Charlie Rose, a North Carolina Democrat who is chairman of the subcommittee on oversight and evaluation. He told a reporter Tuesday that the National Security Agency, the Defense Intelligence Agency and the CIA had opposed public release.

"They felt it should be a confidential slap on the wrist," Mr. Rose said. "I felt strongly otherwise. It's important that the public know our committee is not afraid to go public with criticism even though that criticism may not be pleasant for the intelligence community."

The 47-page draft covers intelligence reports and assessments during the administrations of Presidents Jimmy Carter and Ronald Reagan, and it raises repeated questions about instances in which administration policies may have had skewed intelligence gathering.

"The basic concern is that tendentious rhetoric, including occasional oversimplification and misstatement, can drive out some of the needed collection and analysis," the study concludes.

The study repeatedly emphasizes what the committee staff described as the high quality of most intelligence reporting from Central America. But the staff said that it wanted to "sound an early note of concern about the larger costs that might be incurred by the particular kinds of weaknesses" found. Shortcomings included:

- A major intelligence briefing for the committee last March 4 on outside communist support for the Salvadoran insurgency was "flawed by several instances of overstatement and overinterpretation."

At one point, the committee was told that "lots of ships have been traced" from the Soviet Union to

unloading points in Nicaragua. A later, written response conceded that "only a small number had actually been tracked all along the route."

- A slide at the same briefing on "guerrilla financing" indicated that Salvadoran guerrillas were receiving about \$17 million a year. The slide was an extrapolation "based on a single piece of evidence indicating the monthly budget for a commander of one faction on the front."

- Assurances by a CIA official last February that Salvadoran authorities had made much progress in reducing acts of violence in their forces turned out, on further committee inquiry, to have been based solely on statements from the Salvadoran Defense Minister about disciplinary actions for infractions such as drunkenness and a thievery.

Panel Backs Reagan on Arms Budget

Los Angeles Times Service

WASHINGTON — The Reagan administration's record military budget has sailed virtually intact through a key congressional test, confounding some assessments that Congress had returned from its Labor Day recess in a budget-cutting mood.

The Senate's defense appropriations subcommittee approved allocations of roughly \$232 billion, about \$13 billion less than requested by the administration but in line with budget cuts already endorsed by the Pentagon and the White House.

"Nothing, basically, has been cut in this bill," said Senator Ted Stevens, Republican of Alaska, the subcommittee chairman. "We just slowed down the rate of growth of some programs."

The subcommittee bill would increase military spending \$28 billion from the level for this fiscal year, which ends Sept. 30. The measure includes full financing for the MX missile system, the B-1 bomber and two nuclear aircraft carriers. It includes money for an increase in troop strength and for more planes, ships and missiles.

Warning About Future

The subcommittee action came as the Congressional Budget Office warned that Congress, by approving "down payments" on expensive new weapons, was locking itself into heavier and heavier military spending in future years, when the final bills for these weapons will come due.

In approving the two new aircraft carriers, for example, Congress is appropriating only \$25 million to be spent in fiscal 1983. By 1987, however, it will have been obligated to pay out the full \$6.8 billion cost, plus about \$11 billion for support ships to make up each planned new carrier battle group.

NATO Committee Is Divided Over Military Chairman

BRUSSELS — The military committee of the North Atlantic Treaty Organization, the alliance's highest authority on defense, is split over who should be its next chairman, NATO sources said Wednesday.

The West German Defense Ministry nominated General Jürgen Brandt after members of the committee had already agreed to ask General Cor de Jager of the Netherlands to succeed Admiral Robert Falls of Canada at the end of his two-year stint, the sources said.

The Bonn government has since applied pressure in favor of General Brandt, said to be a protégé of Chancellor Helmut Schmidt, to the annoyance of senior NATO officers who view the matter as damaging to the committee's prestige, they said.

The United States, Britain, Spain and perhaps Italy are said to be supporting General Brandt, but he is unlikely to get the required majority when the committee votes later this week, the sources said. Admiral James Ebovie of Britain, a former commander in chief for the Channel area, is a possible compromise candidate.

The military committee is made up of representatives of the NATO countries' chiefs of staff. Its chairman is NATO's most senior officer, who is an adviser on defense matters at ministerial meetings.

Soviet Sailors Seek Asylum

ANKARA — Two Soviet sailors who jumped from their ship as it sailed through the Bosphorus Strait have requested asylum in Turkey, the newspaper Günaydin reported Wednesday. The paper said the sailors jumped into the water Tuesday and were picked up by Turkish fishermen.

U.S. Prayer Bill Remains Blocked

The Associated Press

WASHINGTON — Senate conservatives failed Wednesday for the third and possibly final time to halt a liberal filibuster against legislation that would legalize organized prayer in American schools.

Amid indications that the Senate majority leader, Howard H. Baker Jr., Republican of Tennessee, would soon call a halt to the emotional floor dispute, the Senate voted 54-46 against limiting debate.

The vote on the measure meant the conservative supporters of the prayer measure fell six votes short of the 60 needed to restrict further debate to 100 hours.

The prayer measure, which is sponsored by Senator Jesse Helms, Republican of North Carolina, would strip federal courts of authority to rule on school prayer cases.

Liberals Denounced

Senator John P. East, Republican of North Carolina and a supporter of Mr. Helms, accused the liberals of refusing to allow a majority of the Senate to work its will.

Senator Dale Bumpers, Democrat of Arkansas, said the Senate has an obligation to block any legislation that would give the government the authority to write a prayer for the classroom even if children are not required to participate in the reading.

Mr. Baker said that even if Mr. Helms and his followers are able to force a vote on the prayer issue — which now seems unlikely — the legislation will not clear the Senate before Congress adjourns in early October.

The prayer amendment is attached to a bill on the federal debt limit that must clear Congress by Oct. 1 or the government will be without authority to borrow money to pay its bills.

Mr. Baker said Wednesday that he would use Senate rules to remove the prayer amendment or any other additions that might in-

terfere with passage of the debt-limit bill.

Earlier, Senate liberals said two previous procedural victories showed that they will ultimately win the prayer fight.

Victory Predicted

"We have beaten them," Senator Daniel Patrick Moynihan, Democrat of New York, said after the Senate refused on Tuesday, 53-47, to end the filibuster. "We have broken the radical right."

In Tuesday's vote, Mr. Helms picked up only three votes more than he had in the first vote on limiting debate Monday.

Mr. Baker said that he would call together the main figures in the monthlong debate on the so-called social issues and look for some way to resolve the fight.

In Tuesday's vote, 28 of the Senate's 46 Democrats voted to keep the filibuster alive and thus to avert an on-the-record vote on the prayer legislation. Both sides have predicted the Senate would pass the prayer measure if there is such a vote on it.

Mr. Moynihan, Senator Lowell

Russia Says It Will Sign Law of Sea Convention

UNITED NATIONS, New York — The Soviet Union, which abstained when the UN Law of the Sea convention was adopted in April, announced Wednesday that it had decided to sign the document.

At the same time, Venezuela, one of four countries that voted against the convention, informed the Law of the Sea Conference that it was withdrawing its offer to hold the signing ceremony in Caracas in December. The announcements were made here at a conference session to consider recommendations for technical changes in the convention.

Florida Hears 'Bullet Train' Plans

5 Nations Vie for Miami-Orlando-Tampa Rail Project

By Barry Bearak
Los Angeles Times Service

TAMPA, Florida — Representatives of five nations have made sales presentations for their own version of a high-speed "bullet train," each trying for the inside track to a possible multimillion-dollar Florida project similar to one planned in California between Los Angeles and San Diego.

The Florida route would most likely link Miami, Orlando and Tampa. A special committee appointed by the governor is looking for a system that could make the 250-mile (400-kilometer) trip from Miami to Disney World, the amusement park near Orlando, in 80 minutes.

Japanese May Have Edge

Businessmen from Japan, France, Britain, West Germany and Canada made presentations Tuesday. Their ideas ranged from a Canadian plan for a slower train pulled by a conventional diesel engine to a German train that glides on air four inches above its track.

"Everybody starts even, and nobody has an advantage," said John Parke Wright, the Tampa millionaire who heads the review committee.

Still, it appears that the Japanese have an edge. They have close

connections to the American High Speed Rail Corp., an American booster of the bullet train. Also, a subsidiary of the Japanese National Railway is conducting a \$1 million feasibility study in Florida, using a grant from a Japanese foundation.

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Senate Report Finds FBI Inquiry Into Vesco and Libya a 'Disgrace'

By Robert Pear
New York Times Service

WASHINGTON — The Senate Judiciary Committee has issued a report charging that the Justice Department's undercover investigation of Robert L. Vesco and his links to Libya was "a shame and a disgrace."

The 56-page staff report, released Tuesday, concluded that the Federal Bureau of Investigation had "created a conspiracy" and "seemingly lost sight of its mandate to uncover crime, not create it."

The report said that "a special prosecutor should have been appointed" to investigate allegations that Mr. Vesco, a wealthy financier, attempted to bribe White House officials in the Carter administration to halt extradition proceedings against Mr. Vesco.

Airplanes for Libya

While investigating this allegation, the Justice Department received information suggesting that Mr. Vesco had tried to obtain the release of airplanes for Libya by contacting Carter administration officials, including Hamilton

Jordan, chief of staff in the Carter White House, and John C. White, former chairman of the Democratic National Committee.

Shipment of the planes had been blocked because of Libya's support for terrorist organizations.

The Judiciary Committee report said there were "serious inconsistencies" in Mr. White's sworn testimony before the committee and a federal grand jury in New York. In addition, it said that he "got special treatment" from federal prosecutors, who advised him "with specificity" of the allegations and evidence against him.

Vesco Still at Large

In a telephone interview Tuesday, Mr. White denied that he had received special treatment, saying he had endured "agony, innuendo and adverse publicity" before the Justice Department announced in November 1981 that no charges would be filed against him.

The FBI had no immediate comment on the committee report.

Mr. Vesco remains a fugitive and was last reported to be in Nicaragua. The U.S. government still wants to bring him back to the United States to face charges relat-

ed to the looting of a mutual fund and an illegal contribution to the 1972 re-election campaign of President Richard M. Nixon.

The committee said: "The nature of the co-conspirators and the crime that was the object of this conspiracy, namely to subvert American foreign policy, demanded special care and attention. The FBI, however, gave no thought to the investigation's profound implications for foreign policy and, if anything, was careless about monitoring the actions of its informant."

"It is well that justice is blind," the report said, "for she would not care to see what has been wrought in her name."

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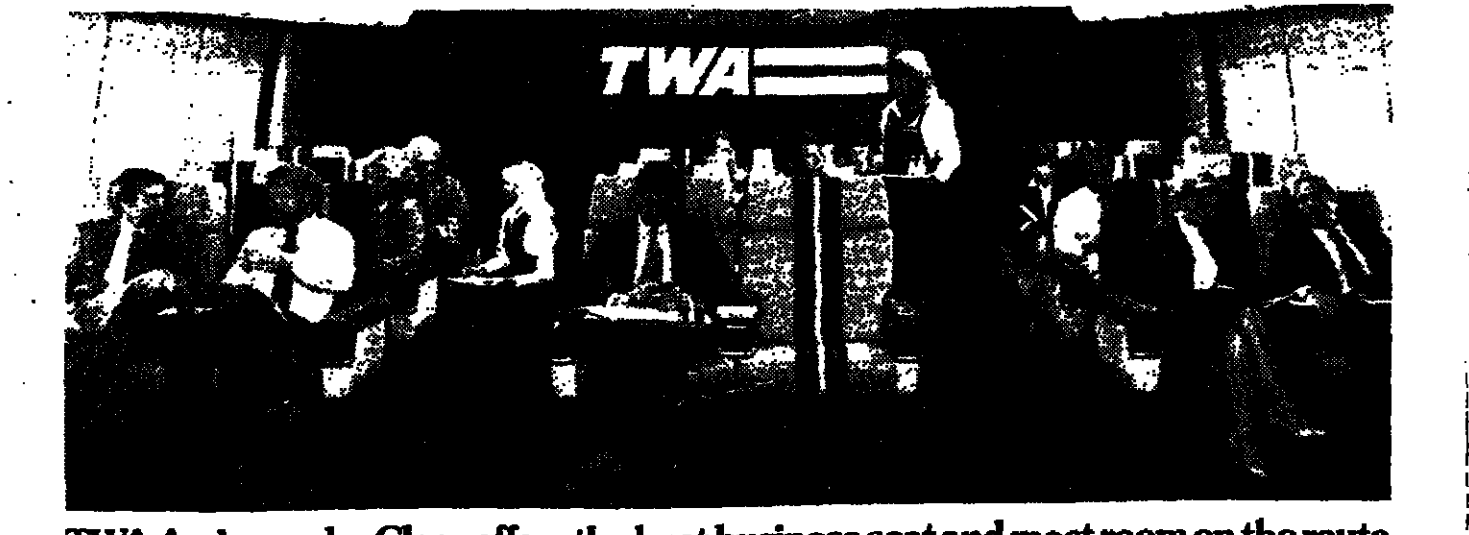
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Free Democrats Drop In West German Poll After Leaving Schmidt

By James M. Markham
New York Times Service

BONN — Amid signs of mounting disarray within the small Free Democratic Party, an opinion poll released Wednesday showed that its national support had dwindled to only 2.3 percent of the electorate after it decided last week to abandon Chancellor Helmut Schmidt's government.

The poll, conducted by the respected Allensbach Institute in the previous three days, was unsettling news for Hans-Dietrich Genscher, the Free Democratic chairman and outgoing foreign minister, who has been sharply criticized by the party's left wing.

Late Tuesday night, a caucus of the party organization in Bremen joined regional groups in West Berlin, Schleswig-Holstein and Hamburg in demanding a special congress to reconsider the decision to switch alliances in Bonn. Four of the 11 regional organizations are required to summon such a congress.

Convening in Wiesbaden for state elections that will be held Sunday, elections that could be crucial to the survival of the liberal party, Mr. Genscher told reporters that the move to call for a special party congress was "a legitimate demand."

But in Bonn, Günther Verheugen, a Genscher loyalist who is expected to resign as party general secretary, said that the earliest an emergency congress could take place was Oct. 16, well after the new coalition with the Christian Democrats will have been consummated.

The last Allensbach poll, taken in July, gave the Free Democrats 5.1 percent of the vote, compared with the 2.3 percent now. The new poll put the Christian Democrats' share at 52.7 percent, down from

53.7 in the summer, and showed that Mr. Schmidt's Social Democrats had rallied from 31.4 percent in July to 36.8 percent since his defiant call for new elections on Friday when the old coalition collapsed.

The sounding also found that support for the Green movement of ecological and anti-nuclear protest had dipped slightly, from 9 percent in July to 7.8 percent. Allensbach also reported that 75 percent of those polled supported Mr. Schmidt's call for immediate new elections, whereas 82 percent favored the break-up of his coalition proper because the two parties could no longer work together.

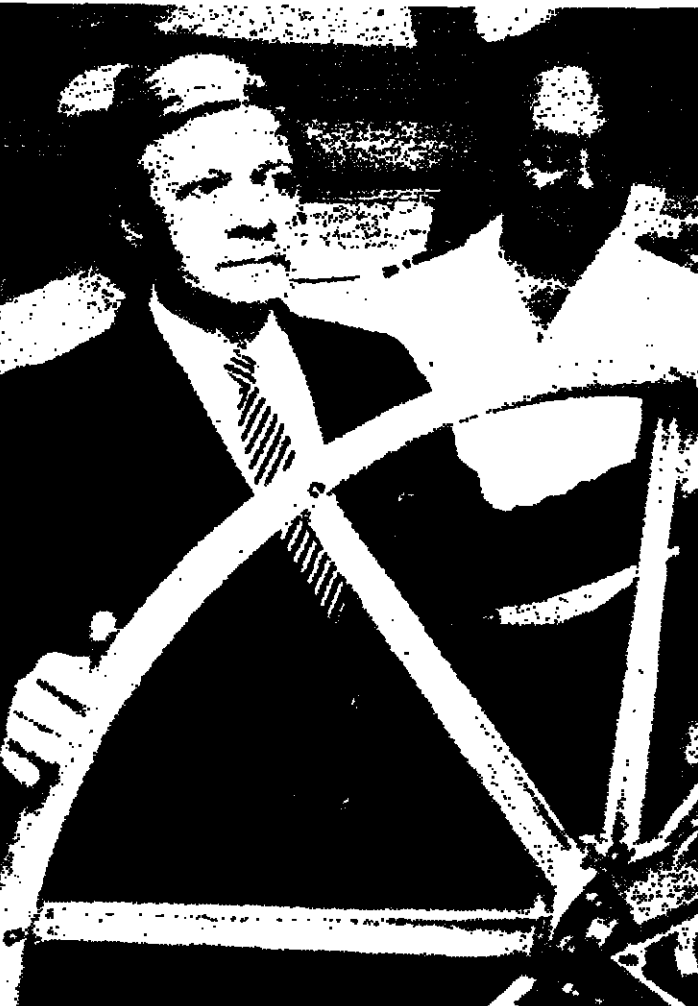
The somber news for Mr. Genscher came as he was engaged in sensitive negotiations in Bonn over the distribution of portfolios in the cabinet to be led by Helmut Kohl, chairman of the Christian Democrats. The Christian Democrats, together with their sister party in Bavaria, the Christian Social Union, and the Free Democrats have pledged to make Mr. Kohl chancellor on a so-called "constructive no-confidence" vote against Mr. Schmidt on Oct. 1.

In an effort to buck up party morale, Mr. Genscher sent a letter Tuesday to Free Democrats leaders Wednesday justifying the decision to leave the Schmidt government.

The letter said that divisions within the chancellor's Social Democrats had made it impossible to follow a coherent foreign policy or struggle against unemployment.

He asserted that support for "our courageous decision" to join the Christian Democrats was growing. "Ever more voters recognize," he wrote, "that it is worthwhile to support this courageous Free Democratic Party."

That just the opposite may be true is worrisome for Mr. Kohl, too. The Christian Democratic



Chancellor Helmut Schmidt took the wheel of a Rhine riverboat Tuesday while campaigning for state elections in Hesse.

leader needs Mr. Genscher and a relatively credible Free Democratic Party as a counterweight to his conservative Christian Democratic colleague, Franz Josef Strauss, who believes that his Bavarian organization should be the new government's preeminent partner.

As a result of these tensions, the vote in Hesse state on Sunday has taken on considerable importance. Should the Free Democrats tumble below the 5-percent cutoff limit needed to gain representation in

the state legislature, Mr. Genscher's hand in the coalition bargaining will be weakened — and, to an extent, Mr. Strauss's strengthened.

Moreover, a poor showing in Hesse will give fresh ammunition to Mr. Genscher's critics and doubters within the Free Democrats, possibly increasing the chance of a challenge to his leadership at an emergency party congress next month or at one already scheduled to be held in West Berlin on Nov. 5.

Soviet Mission Will Go to China To Seek New Talks, Sources Say

By Michael Weisskopf
Washington Post Service

BEIJING — The Soviet Union will send a high-level diplomatic mission here next month in the hope of persuading Chinese officials to resume political talks for the first time in nearly three years, according to European officials.

China, however, has refused to commit itself to any discussions or even to acknowledge the coming Soviet visitors as official guests, the sources said. Instead, they will come as private guests of the Soviet ambassador.

The mission will be headed by Deputy Foreign Minister Leonid F. Ilyichev, who was the chief negotiator at the last round of Chinese-Soviet talks before China suspended them in late 1979.

Beijing, which broke off top-level government dialogue with Moscow after the Soviet Union intervened in Afghanistan in December 1979, publicly disclaims knowledge of the trip but is expected to provide some forum for discussions with the delegation at least as an act of courtesy, the sources said.

Any talks would be preliminary and would not deal substantively with the major obstacles that have provoked enmity between the two communist powers for more than 20 years, diplomats said.

"The Chinese feel very uncomfortable with the high level of this visit, which was imposed on them unilaterally by the Soviets," said a European diplomat. "But they say, 'If the Russians ask for a visa for Mr. Ilyichev, how can we refuse it?'"

Trying to exploit tensions in U.S.-Chinese relations over American arms sales to Taiwan, Moscow began urging Beijing last spring to normalize relations.

China, while pledging never to play "the Russian card," has taken several small steps to improve economic and cultural relations, boosting trade this year by 44 percent, inviting Soviet athletes for sporting matches and sending professional delegations to Moscow.

But Beijing has kept its political distance from the Soviet Union and ruled out any normalization until Moscow pulls its military back from China's border.

Last month, Yu Hongliang, head of the Soviet desk at the Foreign Ministry, visited Moscow to test the latest Soviet overture.

Sources said the Russians were unwilling to discuss the issues China considers most compelling — Soviet stationing of troops in Afghanistan and on the Chinese-Soviet border and arming of Vietnamese forces along the Chinese-Vietnamese border and in Cambodia.

Nevertheless, Beijing has displayed an interest in broadening

its "people to people" relations with the Soviet Union while putting the larger strategic issues on hold.

The new moderation after years of hostility toward Moscow is seen as part of China's overall plan to stabilize its borders so it can focus on economic modernization. Recently, China has moved to settle its boundary dispute with India

while wooing North Korea with supplies of at least 20 newly built MIG-21 jet fighters and a lavish reception for the visiting North Korean leader, Kim Il Sung.

Diplomats also view the greater Chinese flexibility in dealing with Moscow as evidence of a strategy of positioning itself between the superpowers so as to enhance its bargaining position with both.

Thatcher Begins Talks With Chinese Officials

By Christopher S. Wren
New York Times Service

BEIJING — Prime Minister Margaret Thatcher of Britain arrived Wednesday in China for an official visit that is expected to center around discussions with the Chinese leadership on the future of Hong Kong.

Ms. Thatcher, who flew in from Tokyo early in the afternoon, is the first British prime minister to visit China while in office. She made a trip to China in 1977 as opposition leader of the Conservative Party.

Her visit comes at a time when the British colony has been experiencing financial jitters in anticipation of 1997, when the British lease on 90 percent of Hong Kong's territory is scheduled to expire.

No Specific Proposals

The prime minister is understood to have come to China with some ideas about an eventual solution but no specific proposals. She is expected to try to find out what the Chinese leaders, who have been sending out conflicting signals, have in mind for Hong Kong.

Ms. Thatcher is being accompanied here by Sir Edward Youde, the British governor of Hong Kong.

Upon arrival, Mrs. Thatcher was accorded a ceremonial welcome, complete with an armed forces honor guard and chanting schoolchildren, before sitting down with Prime Minister Zhao Ziyang for her first round of talks.

The meeting dealt with international issues, British sources reported. Mrs. Thatcher said Wednesday night that Hong Kong would come up in the discussion of bilateral issues when she meets with Mr. Zhao again Thursday morning. She is scheduled to see Deng Xiaoping, China's foremost leader, on Friday.

Another issue in her visit here is the status of Chinese-Thai trade, which has been running more than 2-to-1 in China's favor so far this year. Statistics published for the first seven months of 1982 disclosed that China imported only

52.3 million pounds (23.8 million kilograms) of British goods while exporting 121.2 million pounds of its own products to Britain.

Criticism in a Toast

In a dinner toast at a state banquet held Wednesday night in her honor, Mrs. Thatcher implicitly assailed the Soviet Union, telling Mr. Zhao that China's opposition to hegemonism, its code word for expansionism, was a concept that Western Europe understood.

Western diplomats in Beijing do not expect Hong Kong's future to be resolved during Mrs. Thatcher's visit, but they think that she might press the Chinese to set up a structure for continuing joint discussions of the complex problem.

The issue has been discussed quietly since last spring through the respective embassies in each capital, according to a Chinese source who has followed the situation.

Britain is thought to favor an arrangement that would acknowledge ultimate Chinese sovereignty over the colony while letting the British keep governing after 1997. A similar compromise already exists between China and Portugal in Macao.

Australia Food Exports To Meet Islamic Code

By Reuters

CANBERRA, Australia — The Australian government will ensure that meat exported to Islamic nations is prepared in accordance with Moslem religious requirements, Parliament was told Wednesday.

Trade Minister Doug Anthony, in answering questions on an official report that revealed widespread corruption in the meat industry and inefficient supervision by the local Moslem authorities, said the government was considering forming a single authority to oversee exports to the Moslem countries. Australia has a multimillion-dollar meat export trade with the Middle East.

Spain's Socialists Try to Allay Business Fears

Bankers Remain Unconvinced by Platform as Elections Approach

By Susan Roberts
Reuters

MADRID — The Spanish Socialist Party is trying to calm edgy businessmen and bankers with a moderate economic platform, but it has not had much success.

The Socialist leader, Felipe González, whose party is expected to win the national elections Oct. 28, says he has no miracle cures for Spain's economy, which has an inflation rate of about 15 percent and two million unemployed, or 16 percent of the normal work force.

But one of the main planks of his election platform, to create 200,000 jobs annually by stimulating investment and cutting the work week, is considered unrealistic by many in the business and banking community.

"At first glance, there are depressing similarities with France," an economist said.

Details of Plan

The Socialists say the extra jobs will be created by reducing employers' social security payments, introducing early retirement and setting a standard work week of 40 hours, which will eventually be reduced to 35 hours.

Mr. González plans to stimulate production and investment by encouraging banks to extend credit to worthy projects.

But banking sources said President Francisco Mitterrand had failed to curb unemployment in

France with similar plans to increase jobs. They added that his plans to create employment during the next few years can have only limited success because of the world recession.

Some bankers, as well as the Socialists' opponents, said such moves to stimulate employment will only aggravate Spain's public-sector deficit, which last year stood at 618 billion pesetas (\$5.5 billion), or 3.6 percent of the gross domestic product.

They are also skeptical about the Socialist plan to fight inflation, though Mr. González aims to curb it with certain price controls on some public services and basic products not subject to normal market competition.

But uncertainty over the implications of a Socialist election victory

has caused jitters on the country's four stock exchanges. In Madrid last week the Bourse index fell to the year's lowest level on five successive days.

The stock-exchange slide started at the end of last month, soon after former Prime Minister Leopoldo Calvo Sotelo dissolved the Cortes and called for the October elections.

There were some market rumors that the right, aware that the Socialists were likely to win, was engineering a decline deliberately to spark alarm. But this was denied by the research director of the Bourse, Alberto Carroloza, who said the fall was due to normal pre-election pressure, and by Mr. González.

"Why should this happen?" Mr. González said, adding: "We have the confidence of 90 percent of the banking system."

Nationalization Plan

Bankers said they were relieved at the limited nationalization program of the Socialists, who say they would put only the national power grid under state control. According to Mr. González, the pri-

vate sector appeared to be healthier on the whole than the public and there was no point in further nationalizations.

The Spanish Socialists, unlike their French counterparts, have not alarmed high-income earners with plans for increased taxes but say they will concentrate on improving the existing, notoriously inefficient, system.

Regional Projects

One element causing concern, especially among foreign banks, is a plan to restructure the country's savings bank system. The Socialists would like to stop them from trading on the interbank market and to channel their funds into regional projects.

"It looks as if the Socialists would like to corner surplus savings bank funds for themselves, which could be very serious for us," a foreign banker said.

Some foreign bankers said that if the Socialists came to power they would find it difficult to abandon lightly the existing commitment to the interbank market because many government entities now borrow heavily on it.

Poland Hints Solidarity Could Be Eliminated

The Associated Press

WARSAW — The Polish government suggested Wednesday for the first time since martial law was declared that it was thinking of eliminating the Solidarity trade union altogether and of building new unions from scratch.

Rezeropolita, the government daily newspaper, said in a commentary that it was "unimaginable" that the name Solidarity and its leaders still active in the underground could resume their work "as if nothing happened."

The lengthy commentary was signed by an "observer," a signature usually reserved for the government paper's toughest statements. It indicated the authorities may be preparing to reveal its plans for the future of unions suspended when martial law was declared Dec. 13.

"It is hard to imagine a situation when the name of the union, burdened with such a bad record, would return to public life as if nothing had happened," the paper said. "Activists of the suspended union... should have thought better of the political consequences of their actions."

The paper listed a series of "negative facts" associated with Solidarity. It mentioned the union's underground activities, actions against martial law, organization of illegal strikes, street demonstrations and riots, leaflet campaigns and distribution of brochures attacking the Communist Party and its authorities.

Criticism Sharpening

The union and its underground leaders have come under increasingly sharp criticism since the riots and protests of Aug. 31 that marked the second anniversary of the founding of Solidarity.

Rezeropolita said the government had signed agreements with workers two years ago and "not Solidarity, which still did not exist as an organized structure then."

"The idea was to set up self-governing and independent trade unions that would be socialist in nature, abide by the constitution and refrain from performing the role of a political party," the paper said.

Fugitive union leaders have said any attempt to dismantle Solidarity could lead to renewed protests and disturbances.

New Attack

The government commentary coincided with a new attack on dissidents in the Communist Party paper, Trybuna Ludu. That attack for the first time placed two top Solidarity leaders into the ranks of dissidents, calling them "commandos."

Trybuna Ludu said Anna

one of Solidarity's top three leaders, had worked with the dissident Committee for Social Self-Defense, or KOR, on an "anti-Polish" campaign during the union's congress in Gdansk a year ago.

The article also depicted the KOR and union leaders as local agents of U.S. and NATO plans to promote "annihilation," "anarchy" and "civil war."

Meanwhile, Henryk Kuron, father of the KOR leader, Jacek Kuron, was buried here Wednesday in a ceremony that was held without his son. Jacek Kuron, who has been held in prison since martial law began, was allowed 20 minutes at his father's coffin before being taken back to jail.

About 1,000 people attended the service, but no incidents occurred. Henryk Kuron died at 77 last Friday and was not involved in KOR activities.

OAS Rights Unit To Check Charges Against Guatemala

By Reuters

MEXICO CITY — An international team of human rights investigators has arrived in Guatemala at the same time that a leftist peasant group was alleging that 4,000 civilians had been murdered since President Efraín Ríos Montt came to power five months ago.

The Inter-American Human Rights Commission, which is affiliated with the Organization of American States, was invited by the government to check reports that the Guatemala's Army and security forces had been involved in widespread and systematic killings of civilians.

In Mexico City, the newly formed Peasants' Committee of the Altiplano said in a statement that the Guatemalan government had killed 4,000 civilians, most of them peasants, in a series of massacres since General Ríos Montt assumed power in a military coup March 23.

Diplomatic sources and aid officials in Mexico have said that the 18,000-member Guatemalan Army began using scorched-earth tactics after the president declared a state of siege and ordered a military drive against leftist guerrillas.

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Reading Skills in U.S. Withering, Experts Say

By Lawrence Feinberg
Washington Post Service

WASHINGTON — While virtually everyone in the United States now learns how to read, the country faces a serious problem with the large number of people who choose not to read or only read simple, "dumbed-down" material, a panel of experts and publishers said this week.

Most of them pointed with concern to the stagnant circulation of daily newspapers and to flat sales of books. They blamed the problem on the failure of schools to set high

standards. Some suggested it might be a consequence of mass literacy itself.

Regardless of the cause, they said America's "a-literates," or people who can read but do not understand the country's technological economy. These non-readers also create a danger for democratic government, they said, by opening themselves to political manipulation.

The exchange took place at a conference on "a-literates" sponsored by the American Enterprise Institute, a center for public policy research in Washington.

'Colder Reality'

"The problem lies in the gap between our expectations for universal intellectual equality and the colder reality," said Townsend Hoopes, president of the Association of American Publishers. "Obviously, in a world of increasing social, economic and technical complexity, the power will gravitate to those with the greatest knowledge. And if the gap between the educated minority and uneducated mass is too great, the opportunities for political manipulation will grow."

Nick Timmesch, a former newspaper columnist who now is a resident journalist at the American Enterprise Institute, said, "It is not difficult to conjure up an Orwellian world where lower-income and minority people become television's biggest audience, and people who do a lot of reading become the

decision-makers, even the elitist class."

But another panelist, Kent Rhodes, president of the Magazine Publishers Association, noted that magazine sales have risen rapidly. "There is evidence that people are reading more even if they aren't reading things that intellectuals think they should be reading," Mr. Rhodes said.

Art of Simplification

"I'm not so worried about simplification of text," he said, referring to complaints that many articles and books have been "dumbed down" for people who cannot or will not read anything complex. "There is a great art to doing that well."

Test Scores of College-Bound in U.S. Rebound for First Time Since 1963

New York Times Service

NEW YORK — Both the verbal and mathematics scores on the Scholastic Aptitude Test rose this year for the first time in 19 years. It marked an upturn in what has become a leading barometer for measuring the condition of the nation's schools.

The average score for seniors who graduated from high school in June was 426 on the verbal part of the standardized test and 467 on the mathematics section, compared to average scores last year of 424 on the verbal part and 466 on the mathematics part, according to the College Entrance Examination Board, which sponsors the testing program. Scores range from a minimum of 200 to a maximum of 800 for each of the two sections.

In 1963, the year before the string of declining scores began, the national averages were 478 for the verbal score and 502 for the mathematics score. No conclusive explanation has been offered for the past declines, and the cause of

the improvement this year is also apparently unknown.

George H. Hanford, president of the College Board, said in a statement, "This year's rise, however slight, combined with last year's holding steady, is a welcome sign for educators, parents and students that serious efforts by the nation's schools and their students to improve the quality of education are taking effect."

South Korean Students Said to Hold 3 Protests

The Associated Press

SEOUL — Students upset with the South Korean government and critical of Japan reportedly demonstrated Wednesday on at least three university campuses in Seoul. Plainclothes police were reported to have broken up the protests.

Witnesses said about 200 students took part in a protest at Yonsei University, criticizing the Seoul government and denouncing Japan for revising textbook accounts of Japanese behavior in World War II. About 1,000 persons reportedly took part in a similar protest at Sungkyoonwan University. A third protest was reported at Ehwa Women's University.

3 Slain in Shooting in Italy

United Press International

CROTONE, Italy — Gunmen killed a man and two 9-year-old girl relatives Tuesday in Italy's southern Calabria region in what police said was one of a series of

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A Future for Lebanon

Many foreigners have virtually written off Lebanon. They see its politics as a jungle and the solution, if they think any at all is possible, in a Syrian-Israeli partition or condominium. Many Lebanese, however, are conspicuously unready to yield up their chances for a national rebirth, notwithstanding the divisions that have rent the country and the cruelties that have been inflicted upon its citizens, often by each other.

The clearest evidence of their faith is that they are clinging to the rail of the Lebanese constitution, which mandates the start of a new six-year presidential term today. In August, Bashir Gemayel was elected, even though the country was still a war zone occupied by foreign powers. He was cut down last week — his death cost Lebanon its distinction as the lone Arab country not to have lost a head of state to violence. By Tuesday, however, the Lebanese had collected themselves and replaced him with his older brother, Amin.

What stands out in Tuesday's election in parliament is that Gemayel's would-be competitors among his fellow Maronite Christians fell away, and his Moslem erstwhile rivals united to make him Lebanon's first one-ballot president by a margin of 77-0, with three abstentions. Enough is enough, every-

one seemed to be saying. The vote for Bashir had been 57-1, with four abstentions.

Bashir Gemayel was first of all a militia leader in Lebanon's civil war who had made an impressive but late start at trying to conciliate Lebanon's disparate factions. Amin Gemayel, a 40-year-old lawyer who has been a leader of his clan's Phalangist Party and has served in Parliament for 12 years, is regarded as better suited by temperament and experience to bring Lebanon together. This reputation helps explain why Moslems accepted his disavowal of any Phalangist responsibility for the West Beirut massacre, although some Phalangist militiamen — renegades, he says — did take part in it. The worrisome flip side of this explanation, of course, is that Mr. Gemayel may not control his men.

That he will be sorely tested goes without saying, not least by Israel, which, despite everything, still seems inclined to use its Lebanese presence to bargain for an early peace treaty with Beirut — a treaty whose premature making would put at jeopardy the consensus that is Lebanon's best prospect for escaping from darkness. Mr. Gemayel will need full help from the United States and all of Lebanon's other friends.

— THE WASHINGTON POST.

Deng's Triumph in China

What happened at China's 12th Communist Party Congress was mainly symbolic and mainly predictable. Maybe Deng Xiaoping did not get all that he wanted, but it was made fairly clear that he is in charge of the party that rules a billion people.

By again downgrading Mao Zedong, erasing his post of "chairman" from the hierarchy and banishing Mao's chosen successor from the Politburo, the Congress reconfirmed the supremacy of Mr. Deng and his more pragmatic brand of Marxism.

But confirming history is the function of Communist Party congresses. With rare exceptions, such as the 20th Soviet Congress that exposed Stalin's crimes, these conclaves are pseudo-events. Their purpose is to ratify a course already taken. The triumph of Dengism was ritually sealed by Hua Guofeng's final demotion from the leadership; he was the last major Maoist, an accessory to the now condemned Cultural Revolution.

For Americans, all this should presage a period of stable relations with China, at least on essentials. A potentially disruptive dispute

over Taiwan was defused when President Reagan agreed to level down arms sales to the Nationalists on the understanding that the island would not be claimed by force. The deeper reason for Sino-American partnership, however, is the priority Peking will continue to give to economic growth.

It is Mr. Deng's vision that China can average annual growth rates of 7.3 percent until the year 2000. Production would have to quadruple. Foreign trade and investment are essential, and steady enlargement of a small private sector with energizing incentives. In short, there is a chance to widen and deepen the partnership begun by Mao and Richard Nixon and rooted originally in a shared alarm about Soviet aims in Asia. Increased contacts will occasionally bring frictions — witness Peking's rancor over the recent defection of a young tennis player. But the U.S.-China connection is weathering the deeper disagreements that arise from incompatible ideas about human and political rights. Interests can be shared even when values cannot.

— THE NEW YORK TIMES.

Other Opinion

Menachem Begin Must Go

Judeo-Christian tradition contains no justification for the mass slaughter of men, women and children in two Palestinian refugee camps in Lebanon. The massacre exposes tragically the need for the people of Israel to replace the irascible government of Prime Minister Begin, which set out on the folly of re-invading Beirut. The Israeli military presence in Beirut must end immediately. That beautiful Mediterranean city and thousands of its innocent civilians have been butchered as a result of the military adventurism of Mr. Begin and Defense Minister Sharon.

Surely now, the people of Israel must make a moral as well as political judgment about the events of this past weekend in Lebanon. By re-invading Beirut instead of opting for peace through diplomacy, the Israeli government has contributed to more death and destruction. Of course the Reagan administration must turn up the pressure on the Begin government. But, more important, the people of Israel must see where the Begin-Sharon regime has led them.

Unless Israel gets a new government, the disproportionate militarism of Mr. Begin and Mr. Sharon will not be seen solely as the misguided actions of a particular governing party, but of the nation itself.

— The Raleigh (N.C.) News and Observer.

'A Weird Wonderland'

Were Alice, Lewis Carroll's famous character, to stumble into the halls of the United Nations' General Assembly, she might ask one of the delegates the same question she asked of Humpty-Dumpty in "Through the Looking Glass" — whether one can make words mean whatever one wants them to mean. Ignoring logic, rejecting consistency, the United Nations has fashioned its own strange reality, understandable only by venturing through the looking glass to a weird wonderland. A majority of about 100 nations, for example, consistently castigates the United States for such alleged crimes as trading with South Africa. Never mind that Zimbabwe does, too.

What thrives at the United Nations is a Humpty-Dumpty-like standard affecting rhetoric and practice. This amounts to a political culture, a mood and atmosphere, an evolved

system of practices dictating which behavior is preferred and which taboo, what can be said and what best remains unsaid. It is a political culture dominated by a majority of developing countries, which are seduced or intimidated into extremism by a well-organized totalitarian minority. The result, as a top-level member of the UN secretariat admits in private, is the production of "non-sense." Many a seasoned delegate will agree that the United Nations has been staging a "theater of the absurd" for quite some time.

— The Heritage Foundation (Washington).

The New Dutch Parliament

The election results in the Netherlands have tended to clear the air. The gains made by the right-wing Liberals and Socialists show a marked move toward polarization. On the other hand, the makeup of the new government is no longer dictated solely by the arithmetic sum of party seats; at least in theory, various coalition permutations are possible. This means that the government, when it is formed, will at least represent affinity of policy and not be merely a shotgun marriage.

— Neue Zürcher Zeitung (Zurich).

On Letting Paisley In

The Rev. Ian Paisley, the baroque anti-Catholic leader of militant Protestants in Northern Ireland, is not most Americans' idea of an ideal guest. Still, the State Department made a mistake last year in denying him the visa he needed to make an American lecture tour. A better reproach to the bigotry Mr. Paisley represents would have been a reaffirmation of the American belief that all opinions ought to be heard.

Now the State Department has relented. It [allowed him] to come to the United States to attend the funeral of a friend in California, apparently on the expectation that he would not use the service as a political forum.

That dispensation was still too crabbed. Mr. Paisley, like militant spokesmen for the other extreme on the Irish question, trades in a kind of rhetoric that most Americans find troubling. But so long as such views are expressed peacefully, their proponents should be treated the same way as other foreigners who want to bring their message.

— The Post-Gazette (Pittsburgh).

Menachem Begin and the United States

By James Reston

WASHINGTON — There is no point now in lecturing Menachem Begin of Israel or in calling for his resignation. Presumably he is not immortal, and it would be a mistake to confuse him with the state he merely represents. He is not important but the state of Israel is.

It is for the people of Israel to decide whether he stands for the honor of his country. The more outsiders presume to instruct them about what they should do, the more they are likely to resent interference with their internal affairs. Mr. Begin and Ariel Sharon, the defense minister, are Israel's concern.

The problem for the government in Washington — Congress as well as the president — is not to waste time trying to figure out what is in

Mr. Begin's mind or Mr. Sharon's mind (for all one knows, there is nothing in them), but to be clear about what is in the mind of the United States government.

Both the executive and the congressional branches of the government in Washington are clear that Israel is a strong and valiant nation, the only democracy and reliable military ally the United States has in the Middle East, but Mr. Begin is asking the American government to continue financing policies in Lebanon, in the West Bank and on the Gaza Strip that Washington not only opposes in the U.S. interest but thinks are a menace to peace and even to Israel's security.

Almost one-quarter of all U.S. foreign aid goes to Israel every year. It amounts annually to \$2.7 billion — or between \$3,500 and \$4,000 a year for every family of five in Israel, which is more than the unemployed get in Detroit. And the Israeli arms that destroyed the Iraqi nuclear facility, shot down the Soviet-Syrian missiles and invaded Lebanon and conquered Beirut came from the United States.

Accordingly, the Reagan administration is beginning to think that its private and public appeals to Mr. Begin are not working and that, however reluctantly, it must play its economic card and make clear to him that if he insists on his policies

in Lebanon, the West Bank and Gaza, he cannot continue to count on the economic and military support of the United States.

America is appalled by the tragedy of the massacre of the Palestinians in the Beirut camps. It does not blame the Israelis for this carnage directly, but it blames them indirectly. France has told Mr. Reagan that when its troops reached the refugee camps they were permitted to destroy the land mines but were forbidden by Israeli troops to protect the refugee camps. The Israelis subsequently opened the camps to their "Christian" allies, who murdered the occupants while the Israeli troops waited outside.

All this the Israelis deny, and it will take a long time to sort out the facts. But there is a suspicion at the top of the U.S. government that the Begin government was surprised by a general settlement of the Palestinian problem, with a freeze on Israeli settlements and self-determination for the Palestinians on the West Bank, linked to Jordan.

More than that, it appears that Mr. Begin and Mr. Sharon directed the invasion of West Beirut to create a crisis that would destroy the Reagan plan for a general settlement of the Palestinian problem. The massacre in Beirut has obviously put the Begin government on the defensive, even with its own people, and changed the question.

For now Mr. Reagan is insisting, after the massacre, that the Israelis get out of Lebanon; President Mubarak in Egypt has withdrawn his ambassador from Israel and is also insisting on withdrawal.

American Aid

And the press and the people of Israel are demanding that the Begin government reappraise its policies and face the consequences of its actions and indifference.

Nothing is likely to be done, however, unless Mr. Reagan, like President Eisenhower in the Suez crisis, insists that Israel change its policy or face the loss of American economic and military aid. Mr. Begin is not persuaded by rhetorical threats from Mr. Reagan or anybody else. He is indifferent to the opinion of the world. He is convinced that he has right on his side, and he will fight for the biblical promise of Israel's lands, come what may.

You have to admire the prime minister's courage. He began by terror and he is being destroyed by it in Lebanon. He has gone too far and lost the support of many of his own people at home and many of the Jews in the United States.

The irony of this, after the massacre in Beirut, is that to save his government he must now leave Lebanon and start to negotiate a Palestinian homeland in the West Bank under the Reagan plan, which is the last thing he wants to do.

There is something sad, even tragic about Mr. Begin, fighting on his crutches to the end, quoting selectively from the Bible about Judea and Samaria and using "Christian" mercenaries, like the ghoulies in the Middle Ages, to strip wounded refugees on the battlefield.

It is not only that he has been indifferent to the fate of the Palestinians in the Beirut camps, but that he has been unfaithful to the honorable memory of Israel.

The New York Times.



KALOS

The Case Against Beginism

By Philip Geyelin

WASHINGTON — The Israeli government and those American apologists who marched lockstep with it into Lebanon had trouble enough making their case before the killing of President-elect Bashir Gemayel. And what now, after last weekend's slaughter of innocent Palestinian refugees by rampaging Christian militiamen whose very existence, if not their very act, owes much to Israeli support?

Not even by the most brazen dissembling can the case be made today. The sweep into West Beirut in the name of "stability" (and in violation of plain undertakings to the contrary) and its ghastly consequences have laid bare the bankruptcy of Israeli policy.

The more hollow the achievements of the Begin government prove to be, the more it must seek to achieve, in redemption of what it could not achieve. And so it goes on, in endless, escalatory pursuit of a sense of security that is unachievable by single-minded brute force.

The point is made most forcefully when Israeli "gains" are measured against Israeli claims. Consider, in composite, the argument set forth in recent days by Prime Minister Begin, Defense Minister Sharon, and Foreign Minister Shamir.

It asserts: the destruction of the PLO as a military force; the creation of a bright, new opportunity for Lebanon to regain its sovereignty; the smashing of the "infrastructure" of international terrorism; the prospect of an early peace between Lebanon and Israel; freedom for "moderate" Palestinians to participate in the autonomy process on the West Bank and in Gaza without fear of PLO retaliation.

The expulsion of the PLO means that international terrorism has been dealt a mortal blow," Mr. Sharon wrote a week or so ago in The New York Times. "The whole infrastructure of violence and revolution has been broken."

So how come the Israeli government is loudly protesting the continuing presence of PLO pockets of resistance in Lebanon as justification for Israel's continuing occupa-

tion? As for the crushing of PLO terrorism, the most significant single "mortal blow" of late was the killing of Bashir Gemayel — an act of terrorism which the Israelis instantly credited to the PLO.

Now that the PLO "terrorists" are gone, wrote Mr. Sharon, "I believe Palestinians will come forward prepared to negotiate with Israel on the autonomy plan proposed by [Mr. Begin]." No doubt — if Mr. Sharon means Israel's handpicked Palestinian collaborators on the West Bank. But if he is talking about the autonomy formula agreed to by Israel at Camp David, its prospects are further dimmed, as if by calculation, with every new Israeli affront to Arab moderates.

Reagan

With the PLO now enfeebled, Mr. Shamir says "it will very soon disappear from the political stage. Who will pay attention to their speeches if there are not accompanied by atrocities and massacres?"

Pope John Paul II gave him a quick answer. So, indeed, did Arabs of all stripes at their Fez summit meeting. So have the Europeans. But that is not the worst of Mr. Shamir's astonishing claim. What he is suggesting is that the PLO, and by extension its vast legion of Palestinian supporters, cannot get

attention except by terrorist acts; they are damned if they do and doomed if they don't. By indirection, the Shamir argument would place a premium on PLO terrorism.

So much for the "gains." Now consider some other consequences of Israel's new imperialism — the one that Begin & Co. don't talk about. Ronald Reagan has a Middle East policy, updated from, let us say, the 1950s to at least the late 1970s. It is Camp David in its truest sense — with a role for Jordan. Mr. Begin hates it. But it was Mr. Begin's crude contempt for Ronald Reagan that created it.

Mr. Begin has only himself to blame, as well, for the splintering of what once was automatic, reflexive support among American Jews for Israeli policy. By what he did to enervate the Reagan administration, Mr. Begin has also given his own political opposition something to fasten onto as an alternative to the Begin theology that would lay claim for eternity to the West Bank as an integral part of Israel.

By no test can Mr. Begin's Lebanese adventure be rated a success. The minuses are his to justify as best he can. The pluses are Ronald Reagan's to build upon. This can only be done by finding some way to bring American influence to bear constructively on Israel.

The Washington Post.

A Nigerian's Plea to Limit the Arms Trade

By Jonathan Power

LONDON — Olusegun Obasanjo was president of Nigeria from 1976 to 1979. A military man, he had been instrumental in the defeat of Biafra. He was responsible for returning Nigeria to democratic rule. Now in retirement, he lives on his farm outside Lagos. Some expect him one day to return to an important position, in his own country or, say, as United Nations secretary-general.

It is something of a surprise that a man who has spent most of his working life in uniform should today be arguing so strongly against the arms trade. Yet at a conference on disarmament earlier this year attended by political leaders from West, East and South, he was by far the most demanding in his prescriptions for limiting the arms traffic.

He convinced many of the participants that the industrialized countries should not assume too blithely that their policy of selling Third World countries more or less whatever these want is universally accepted among developing countries.

Zia ul-Haq, Indira Gandhi and Middle Eastern rulers make headlines with regular requests for new and better imported arms, but Gen. Obasanjo argues that, with the exception of movements fighting sophisticated South Africa, developing countries should be limited to the arms they can manufacture themselves. This would lessen both the amount of destructive power available and the involvement of outside powers, which often exacerbate conflicts.

It will only work, Gen. Obasanjo argues, if Third World countries take regional peacekeeping more seriously. No one was more disappointed than he that Nigeria's effort, together with Zaïre and Senegal, to maintain a peacekeeping force in Chad came apart at the seams. It was partly undone, he says, by the United States' decision to supply arms to His Highness Habré while publicly supporting the African peacekeeping force's effort to bring stability to the government of Goukouni Oueddei.

While African efforts to limit the arms trade are in their infancy, Latin Americans have been trying for more than a decade to engineer a common policy of restraint. In the 1974 Declaration of Ayacucho, eight Andean states committed themselves to create conditions for limitations of armaments and an end to their acquisition for offensive purposes, so as to dedicate all possible resources to economic and social development.

Cynics say that agreements to limit the sale of arms are doomed to fail-

ure. Yet far back as the Middle Ages there were understandings among the Christian nations not to transfer weapons to the "infidel" Turks. Then there was the "general act for the repression of the African slave trade" signed in Brussels by the non-slave-trading nations, which prohibited the introduction of arms and ammunition other than flintlock guns and powder into a vast zone of the African continent.

More recently, there was the tripartite declaration of 1950 signed by the United States, Britain and France to inhibit an arms race between the Arab states and Israel by restraining sales. In 1955 it crumbled because the Soviet Union and Czechoslovakia concluded a major arms deal with Egypt; and France, unknown to her two partners, signed a secret sales agreement with Israel.

In 1967 there was another attempt, following a proposal by President Lyndon Johnson for arms control in the Middle East. It is believed that then Soviet Premier Alexei Kossygin

responded with a secret letter endorsing Mr. Johnson's ideas.

There is evidence that Washington and Moscow transferred far fewer arms to their Middle Eastern clients than were requested. Certainly they did not supply new and sophisticated equipment. President Anwar Sadat noted at the time: "It was clear that the stalemate — no peace, no war — suited the superpowers. There was some agreement between them about the level of arms supplies."

In the end, this agreement broke down in 1972, partly because of political tensions again rising in the area and partly, it is alleged, because of Washington's decision to sell F-4 fighter-bombers to Israel.

The precedents may not be totally encouraging, yet they show a glimmer of light. If in the Middle East partial agreements were initiated, more lasting agreements should be possible in less combustible parts of the globe such as Africa and Latin America. Sadly, neither the Europeans, the Soviets nor the Americans have such discussions on the agenda.

International Herald Tribune.

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International Herald Tribune.

SEPT. 23: FROM OUR PAGES 75 AND 50 YEARS AGO

1907: Comparing Socialists

LONDON — The Daily Graphic, in an editorial contrasting French Socialism and German Socialism, says: "French Socialism is anti-militaristic, anti-patriotic, anti-colonial and anti-clerical. The French conceive their Socialism as they conceive most things political, in an atmosphere of class passion and wild doctrinaireism; the Germans, with characteristic sangfroid, organize their thoughtfully and dispassionately, according to the exigencies of their electoral propaganda."

In Paris, Le Figaro calls attention to the rupture between France's Socialists and Radicals declared at the congress at Nancy, and says that the separation was brought about by the will of the Socialists.

1932: Gandhi Fasts On

BOMBAY — Three days after the start of his "fast until death" in protest against the granting by Britain of separate electorates to India's millions of untouchables, Gandhi now appears in good health, and while he remained quiet in order to conserve his strength, his conversation with Hindu leaders, who visited him at Yeravda Prison, Poona, was animated by flashes of wit. Gandhi takes a little water — a few sips at long intervals. He has shifted his quarters closer to the gates of the prison, which are not only open for him to leave when he pleases, but for all who care to see him to enter. Eight years ago, he fasted for 21 days as penance for Moslem-Hindu communal riots.

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The Market Is Up — Meaning?

By Robert J. Samuelson

WASHINGTON — Mark Twain's warning about dabbling in the stock market applies equally to writing about it. "October," he once said, "is one of the peculiarly dangerous months to speculate in stocks. The others are July, January, September, April, November, May, March, June, December, August and February."

Stock prices have risen roughly one-fifth since mid-August, and the strong temptation is to heed Twain's advice and ignore it. The market seems a casino that makes no sense. It improves while retail sales, industrial production and unemployment deteriorate. Why take this seriously?

The answer is that the market is a crude barometer of the economy's health. If it isn't strong, the economy probably won't be either. Economy and market advanced robustly in the 1950s and 1960s; both performed miserably in the 1970s. A weak market was associated with infectious economic bacteria: high inflation, excessive debt, rampant speculation.

The contrast between the markets of the 1950s and the 1970s was between long-term investment and opportunism. There were good reasons for this. Between 1950 and 1965, stock prices nearly quadrupled while consumer prices rose by about one-third. Between 1965 and 1981, stock prices increased by about half, but consumer prices nearly tripled.

What evolved, says Joseph Laird, the Paine Webber analyst, was a "traders' market." If you bought and sold at the right moments you could make money, but buying and holding stocks generally meant economic ruin. So individuals deserted the market. Between 1968 and 1980, the proportion of their financial assets (cash, stocks, bonds) in the market dropped from 45 to 27 percent.

Instead they hedged against inflation by buying real estate, farmland, and other tangible assets. The investment banking firm of Solomon Brothers Inc. reports that in the decade ended last June farmland rose an average of 13.7 percent annually, housing 9.9 percent, consumer prices 8.6 percent and stocks 3.9 percent.

Inflation Down

For corporations, the market collapse contributed to rising debt burdens. Debt became cheaper, equity more expensive. Saying what happened — a decline in the price-earnings ratio — is easier than saying why. But most explanations have one thing in common: inflation.

If a herd mentality seemed to produce unrealistic highs in the go-go 1960s, the reverse may have occurred in the skeptical 1970s. Mr. Laird thinks the trading bias of big institutional investors accentuated the shift. (Pension funds, insurance companies and other institutions now account for about two-thirds of daily trading, compared with about one-fourth in the 1950s.) He says their investment managers are interested only in "how industries will perform for the next three to six months."

The social importance of the market is that when it is working properly, it imitates the individual investor's need to make money with society's need to create true economic value. In the 1970s, it wasn't working well.

Will it now? The most likely cause of the recent surge in interest rates. By raising corporate debt burdens, lower rates should raise profits. They also make debt securities less attractive. This interest rate arithmetic explains why, in the face of lackluster economic news, a higher market is plausible. Lower rates also may foreshadow economic recovery.

The relationship has broken down recently, but major market fluctuations generally forecast real economic changes. Economist Young Kwon at Rutgers University reports that between 1951 and 1978, decisive market downturns typically preceded economic downturns by nine months and major market upturns preceded economic upturns by four months.

Although none of this necessarily means a reversal of the yo-yo market of the 1970s, a strong case can be made that real change has occurred. The cheap credit that fueled the inflationary, speculative 1970s no longer exists. Inflation is declining.

But the other case, almost as compelling, is that disinflation is exacting a toll that will endure for years. Overburdened with debt, countries and companies will expand feebly. Sales, profits and employment will grow weakly, if at all.

The uncertainty underlines the stock market's place in the economic system. It is not the engine of change, but only one working part.

National Journal.

Letters intended for publication should be addressed to the editor and contain the writer's signature, name, and address. Brief letters receive priority, and letters may be abbreviated. We cannot accept responsibility for the return of unsolicited letters, but we value the views of our readers who submit them.

LETTERS TO THE EDITOR

'In Bad Taste'

My nomination for the You Gotta Be Kidding Award goes to William Safire ("A Bid to Cut Israel's Backing," *JHT*, Sept. 17) for the comment, "It is in political bad taste for any leader to campaign against his government's foreign policy overseas." Criticism "overseas"? Everybody does it, all the time. "Bad taste"? The term is dainty for politics. I personally don't see anything "tasteful" in Middle East foreign policy, but then maybe I missed something.

T.F. AMBROSINI,
Neuilly-sur-Seine, France.

Not Laughing

In response to *Loy Aljan* (Letters, Sept. 7): One is tempted to laugh, at the expense of Ireland and the United States, at the suggestion that the British Army might invade Ireland and "keep on bombing and shelling Dublin until all IRA men are rounded up and shipped to their supporters in the United States." The danger is that in the blindly fanatical atmosphere of Northern Ireland there are

serious. Indisputable facts need therefore to be restated.

Such known Irish Republican Army or other terrorists as are found in Dublin are brought before the courts and imprisoned on conviction. There are no gun-toting IRA men walking the streets of Dublin.

There are internationally unique arrangements whereby any person living in Ireland suspected of terrorist acts in the United Kingdom can be tried, and if guilty be convicted and imprisoned in Ireland. In the British Parliament several prime ministers have acknowledged that less than 2 percent of violent crimes in Northern Ireland originate from outside that area. The fact is that IRA havens are in Northern Ireland cities and in border regions which are "no go" areas for British forces and police.

By British admission and definition, 98 percent of the members of the IRA, having been born in Northern Ireland, are British citizens, albeit reluctant ones. Because of Britain's failure to rule Northern Ireland fairly, the people of Ireland have been obliged in the last decade to double the size of their police force and army to keep out of the trouble the vic-

lence which emanates from the United Kingdom. The Irish police and army are in control right up to the border, while vast areas in Northern Ireland remain unpoliced.

The injustices in the Middle East will not be overcome by twisting the facts of the European disgrace of Northern Ireland or by implying that the United States in any way gives succor to terrorists of any kind.

RICHIE RYAN,
Member of the European Parliament for Dublin, Brussels.

How to Vote

Many Americans who have lived overseas for years do not realize they have the right to vote in November's federal elections for congressmen and senators. Also, many of those who have previously tried to vote from abroad found it hard to register and obtain the absentee ballot.

This year improvements have been made. Notably, the State Department has made official a "Voter Registration Week" organized by the Association of Americans Resident Overseas from Sept. 19 to 26 to assist Ameri-

cans all over the world to vote. Credit for this year's special effort should go to Henry Valentino, director of the Federal Voting Assistance Program, to the dedicated voting officers at the U.S. Embassy in Paris, and in particular to Mrs. Dean Ferrier, AARO vice-president and chairman of its Committee on Voting Rights.

If Americans want their voices to be heard in Washington they must vote in federal elections. Ballots should be requested now to vote in November. Questions should be addressed to U.S. embassies and consulates or to AARO, which is a Paris-based, nonprofit, nonpartisan public service organization.

STEPHANIE H. SIMONARD,
President, AARO,
Paris.

COMMUNICATIONS TECHNOLOGY

INTERNATIONAL
Herald Tribune
Published With The New York Times and The Washington Post
SEPTEMBER, 1982

MAJOR ADVANCES in the production and application of computerized information systems have brought the industrialized nations to the brink of the post-industrial era of the information society. The development of the microelectronic silicon chip opened the way for the convergence of the technologies of communication and computing. The computer, in the form of the microprocessor, has made it possible to process and store vast amounts of complex information. This decade began with radical progress in bringing down the size of computers and in applying the technology to everything from television transmission to telephone systems. But with the progress have come problems in marketing and distribution because of the boom in certain products, leading to confusion among buyers, and because of the complexities of applying current laws to industries of the future.

Europe: The National Approach Wins Out Over Collaboration

By Joel Stratte-McClure

PARIS — European countries are individually formulating political and industrial approaches to communications in an effort to reverse trade deficits and penetrate the lucrative U.S. and Third World marketplaces. Their current efforts range from deregulation to increased protectionism but, despite attempts to augment European collaboration, they maintain a basically chauvinistic posture to develop domestic communications industries.

In the past, Europeans have collaborated in space and data communications largely because costs prohibited a nationalistic approach. But they still insist on creating their own computer, military, semiconductor and telecommunications equipment.

Last month European Community countries created a cooperative fundamental research venture, the European Strategic Program for Research in Information Technology, known as ESPRIT, to focus on microelectronics, software technology, advanced information processing, office automation and computer-integrated manufacturing. But there is justified

skepticism about ESPRIT and other transnational efforts.

Pan-European projects are not always successful because of conflicting national programs. The approach by France's Socialist government, for example, emphasizes technological independence in electronics and other high technology sectors.

The Socialists have made electronics one of seven mobilizing programs intended to dictate the country's technical and commercial thrust. They nationalized key companies in the industry — among them Thomson-CSF, Compagnie Générale d'Electricité, Matra and ITT France — and during the next five years will invest 140 billion francs. Fifty percent of this amount is destined for telecommunications and professional electronics, with the remainder split between components, consumer electronics data processing, software, aerospace, office automation and medical electronics.

Although the government contends French companies are autonomous in determining their corporate strategies, many corporate executives have refused to discuss specific orientations prior to the detailed gov-

(Continued on Page 10S)

Satellite Technology Overtakes Prices, Reaches Consumer Level

By Michael Frenchman

LONDON — Go into any yacht harbor or marina today and you will more than likely see many yachts sporting a small stub mast on their sterns. Fixed to the top of the mast will be a white plastic cone looking rather like a futuristic street lamp. This is a satellite receiving and transmitting aerial used for navigation, which can pinpoint the vessel's position to within a few hundred yards anywhere in the world.

Such a device 10 or even five years ago would have been almost unthinkable from a price standpoint. But, today, thousands of small satellite navigation sets, costing in some cases less than \$2,000, are in use. This is one of the more common examples of civilian spin-off from the U.S. military space program.

Satellites and their different applications, particularly in association with cable television, now form the fastest growing sector in the communications business. Satellites are being used for all kinds of purposes apart from simple voice and vision communications. Scientists and agronomists use them to predict weather changes and crop harvests or as remote sensors for measuring variations in the temperature of the sea or to map possible valuable mineral deposits.

Rivalry between the United States and the Soviet Union over military "spies in the sky," whose cameras are said to be able to pick out car number plates, has led to an apocryphal story about the intense competition. It is said that on the roof of a CIA building are written the following words in Russian "If you can read this you are at least five years behind."

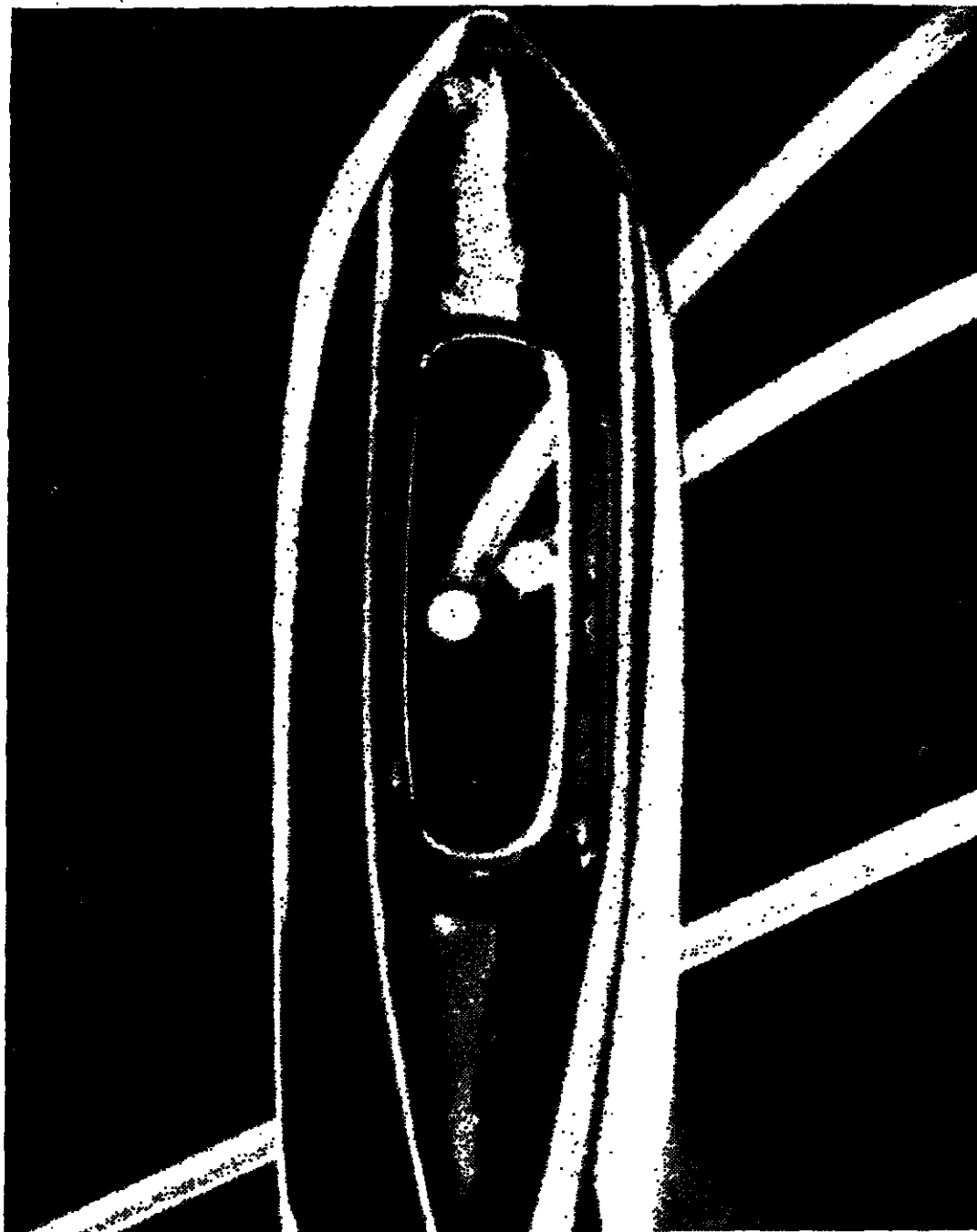
Following the successful launch

of Europe's first orbital test satellite (OTS 11) in 1978, the first test steps were taken toward the practical realization of a European communication satellite. This would pave the way away from total dependence on the Intelsat system, which is backed by more than 100 countries.

Prime Objective

In the following year the European Space Agency began an investigation into the long-term future application of satellite broadcasting systems using the so-called L-SAT program for the development of larger multi-purpose satellites. Studies have been carried out into the production of suitable hardware for direct-to-home broadcasting. One of the prime objectives has been to adopt a design-to-cost principle to stimulate commercial competitiveness.

(Continued on Page 8S)



A pair of fibers can transmit 2,000 simultaneous telephone calls through the eye of a needle. Here are two forms of fiber — multimode and monomode — going through the eye of a needle. The multimode, with the larger core, is now in use in Britain's communications network. The higher performance monomode, with the smaller core, is not yet in use.

Fiber Optics Growth Tied to Home Market For Limitless Data

By Bob Hagerty

PARIS — The prospects for fiber optics depend largely on how much data and diversion can be pumped profitably into the home and office.

For the layman, it is easy to be dazzled by lasers, light-emitting diodes and glass so pure that, according to British Telecom, a block 12 miles thick would be as clear as a windowpane.

But what fiber optics comes down to, said Malcolm Ross, an analyst here for the consulting firm of Arthur D. Little Inc., is "a way of sending a lot of information down a very thin pipe."

Fiber optics has potential wherever that capability is needed, Mr. Ross added.

As a means of carrying telephone signals over crowded trunk lines, fiber optic cables have already arrived. The cables — encasing strands of glass thinner than a human hair that carry messages as pulses of light — are not lab curiosities anymore," said a U.S.-based consultant. "They are now being used as the best alternative" on major telephone trunk lines in North America, Europe and Japan.

The possibilities of the cables are not limited to telephone signals. As an illustration of capacity, British Telecom says a fiber optic cable taking up one-tenth the space of a copper cable can carry about 10 times as much data.

This means fiber optics can flood the home and office with practically limitless amounts of information and entertainment: A business can send a 500-page legal opinion in a flash to an affiliate on another continent, and a family can summon a movie to its television set whenever it wants.

Consumer Flop

But the difficulty is in getting the consumer to pay for such services. British Telecom's Prestel information service, carried by standard phone lines, flopped with home subscribers, although it had some success with businesses.

Britain, France, West Germany and Japan, among others, are experimenting with residential fiber optic networks, but the outlook remains unclear.

Another question is who will make money on fiber optics. "I'm not sure anyone is going to make big money on this," said John S. Bain, a vice president at the New York brokerage firm of Lehman Brothers Kuhn Loeb Inc. But he admitted that the technology would help lower costs for telephone companies and other major information carriers.

Coming Glass Works, which was instrumental in developing fiber optics over the past 15 years and holds patents in the area, should also benefit. So should established telecommunications suppliers around the world. But for such giants, fiber optics is likely to remain a minor field.

Mr. Bain said.

In London, a share analyst said that "one looks more closely" at such telecommunications suppliers as Plessey, STC and BICC in view of their fiber optic ventures. But, he added, the technology is not yet a major factor for investors.

One problem for the investors is that the business is spread among so many companies that it is hard to tell whether any is likely to make a killing.

At any rate, said Mr. Ross, "the money is not really in the glass." Instead, it is in the equipment needed to translate electronic signals into light, and vice versa, at either end of the cable, as well as in the protective wrapper around it, in the labor needed to make, install and maintain the cable, and in the flood of information that can be sent down the strands of glass.

However thinly spread, the market for fiber optic cables and parts like transmitters, receivers and boosters will grow about 40 percent annually in the next several years, according to Gnostec Concepts Inc., a Menlo Park, California, consulting firm. Gnostec estimated that the U.S. market, which accounts for about half of the world market, would total \$355 million this year, up from \$1 million in 1975.

(Continued on Page 11S)

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Telecommunications

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Increase in Capacity, Sophistication Aids New Regional Satellite Systems

By Robert Bailey

LONDON — The Arab Satellite Communications Organization's Arabsat voice and television system and Europe's L-SAT are among the dramatic advances the world is going to see in the next few years as satellite systems increase in capacity and sophistication and new regional systems go into orbit in the United States, Europe, the Middle East and the Far East.

After L-SAT is launched by the European Space Agency's Ariane rocket in 1985 — provided the rocket can overcome its present technical problems — it will be able to directly broadcast up to five television programs from space and channel 125,000 telephone calls, or a mixture of telephone, telex and TV traffic. It will not be long before domestic viewers tune into a vast choice of programs, using small home antennas and signal converters.

In the professional field, the possibilities are just as promising. The U.S. Satellite Business Systems consortium is developing a service that will provide corporate headquarters and factories in the eastern and central United States with their own 16.1-foot (4.9-meter) dish antennas to receive and transmit their telephone, telex and data traffic via two orbiting satellites. Teleconferences are also going to become commonplace, cutting down on repetitive executive travel.

Increased Capacity

Regional satellite systems have been around for some time, but only comparatively recent electronic advances have given satellites increased capacity, and the promise of cheaper launches has encouraged their use.

The first practical use of satellites came in 1965, when the International Telecommunications Satellite Organization's Early Bird and the Soviet Union's Molniya satellites were launched.

Early Bird could handle 240 voice circuits or one television channel — the latest Intelsat V series will offer 12,000 telephone circuits plus two television channels. By 1990, an Intelsat VI series could provide up to 100,000 circuits.

As a result of the increase in orbiting satellite power and the ability

of domestic systems to take advantage of directional beams and the higher power, there has been a drop in the size and cost of earth stations.

In domestic systems, earth sta-

tioning this year a teleconference was held between businessmen in Cairo and three U.S. cities.

With the technical concepts now proven, widespread practical application cannot be far off, particu-

larly in regions such as the Middle East, where there is massive investment in telecommunications. Arabsat's first satellite is due to be put into orbit in February 1984. It is being built by the Ford Aerospace and Communications Organization and France's Aerospatiale to handle receiving and retransmitting signals for 8,000 telephone channels, seven television channels and one channel for community television reserved for educational programs. A second satellite is also scheduled to be launched and a third will be built as a ground spare.

Although a decision on awarding contracts for ground stations has yet to be taken, assuming all goes according to plan, Arabsat will serve 120 million people spread over 3,700 miles (6,000 kilometers) east to west from Jordan to Mauritania, and 2,500 miles (4,000 kilometers) north to south from Syria to Sudan.

One Third World speaker at the recent United Nations Unispace-82 conference in Vienna suggested that Arab countries build, launch and operate their own communications satellites.

A space boycott, he commented, would be just as easy to operate as an oil boycott.

'Countries with large land areas and diverse populations have come to realize the potential of satellite systems...'

tions at remote sites can now carry light traffic, which would have been considered unprofitable in the past.

Countries with large land areas and diverse populations have come to realize the potential of satellite systems dedicated to their own regional use. The large increase in telephone, data and broadcasting traffic anticipated in the next 10 to 15 years is leading a number of countries to consider using their own satellites, rather than merely leasing transponders from Intelsat.

Canada was the first country to put domestic satellites into geosynchronous orbit — the technical expression for a satellite moving at the same speed as the earth — with Telesat Canada developing three series of Anik satellites.

In the developing world, Indonesia was quick to exploit space communications with its Palapa system, launched in 1976. Currently being upgraded, the system uses two Hughes satellites directed to some 40 earth stations located in Indonesia's 3,000-island archipelago. Every satellite has 12 transponders, each capable of transmitting 300 to 960 voice grade channels.

Palapa is also used by other Association of Southeast Asian Nations member countries lacking their own regional system.

One of the values of satellite communications is that access can be provided to centralized data and learning systems. In the mid-1970s, daily television broadcasts were beamed to 5,000 remote villages in India using a U.S. National Aeronautics and Space Administration satellite. More extensive communications services have been available since the launch last April of India's INSAT-1A multipurpose satellite.

The use of satellite technology in business is also growing, and

regularly in regions such as the Middle East, where there is massive investment in telecommunications.

Arabsat's first satellite is due to be put into orbit in February 1984. It is being built by the Ford Aerospace and Communications Organization and France's Aerospatiale to handle receiving and retransmitting signals for 8,000 telephone channels, seven television channels and one channel for community television reserved for educational programs. A second satellite is also scheduled to be launched and a third will be built as a ground spare.

(Continued from Page 75)

by the European industry in international markets.

The ESA sees close collaboration with local community users as being of particular importance. The governments of Austria, Belgium, Britain, Canada, Denmark, Italy, the Netherlands, Spain and Switzerland have spent some \$20 million on the project, in which British Aerospace has been acting as the prime contractor for constructing the actual satellites in conjunction with GEC-Marconi.

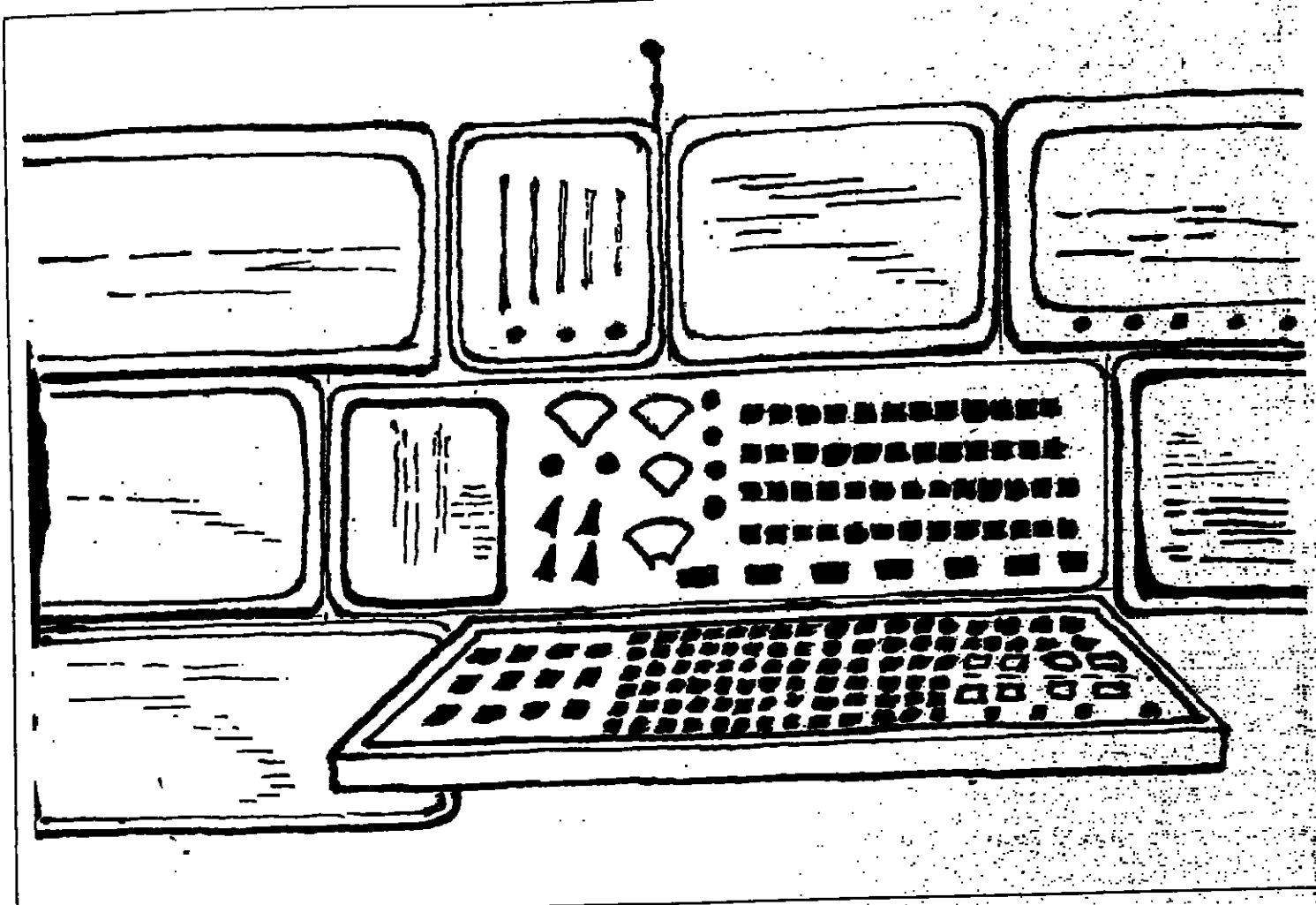
The OTS 11 was designed to beam signals from Helsinki to Algeria and from Belgrade to Madrid as well as all of Western Europe. Hopes for a far more sophisticated European satellite system were dashed with the ill-fated Ariane rocket, which crashed shortly after launching earlier this month. France, which has the majority 65-percent share in ESA, built the launch vehicle, which failed 13 minutes after takeoff from the range in French Guiana. It was

carrying two communication satellites built by Britain, Marecs B and Sirio 2.

ESA had placed high hopes on the Ariane launch, which cost \$1.2 billion, and plans for the future development of the European space program will have been put back by about half a year. But, according to some experts, this will not be a too serious delay. The latest Ariane rocket was designed to carry a payload of two tons. Future flights of the rocket vehicle were booked for the next four years.

Other satellites for the ESA will be launched by the reusable NASA space shuttle later this year. However, the shuttle's maximum payload for a satellite is limited to about half that possible in Ariane for almost the equivalent cost. At present, few countries have alternative options for satellite launch vehicles, which are limited to NASA or ESA's Ariane.

This does not include the Soviet Union, which has entered into a number of joint ventures with de-



Applications Widening as Satellite Technology Brings Prices Down

veloping countries such as India. The Soviet Union in fact first fired the satellite path with the ubiquitous Sputnik back in 1957. This brought to reality the possibility of communication satellites envisaged 12 years earlier by Arthur C. Clarke, the British engineer.

NASA followed the Soviet Union, with the first practical communication satellite, used to transmit signals from one point to another over a short period. As launch vehicles became more powerful it became possible to put satellites much further out into space — 22,000 miles — where they remain in permanent or geostationary orbit until their useful life expires. Telstar was followed by Intelsat and a whole new range of communication satellites with a capacity of thousands of telephone and television link-ups.

Although many people regard satellites as "unreliable" this is far from the truth. Unhappily, the last few weeks has not been too good as an Indian satellite made by

Ford Aerospace finally stopped transmitting recently, causing a serious setback to India's rapidly developing space communications program.

According to Intelsat, 99.5 percent of satellite time is operative. A reflection of the confidence and effectiveness of their reliability can be gauged from the fact that insurance premiums on satellites are as little as 0.8 to 1.2 percent of the total cost of the project. Marecs B, carried by the crashing Ariane, was insured for \$18 million.

The sudden surge in the use of communication satellites is opening up a wide range of opportunities for future developments, many of them associated with cable television, well advanced in the United States but not so in Europe. Satellites have enabled television viewers the world over to simultaneously watch major events like the World Cup soccer or last year's British royal wedding.

Owen Paterson, of Britain's Visnews, believes one of the biggest business applications will be "videoconferences" on an expanded international scale. With videoconferencing, the participants sitting in meeting rooms of studios thousands of miles apart can take part in simultaneous discussions via cameras linked to transmitters and satellites projecting perfect color and sound on to giant screens up to 30 feet wide.

"It is all much simpler than most people believe," Mr. Paterson said.

"We have the broadcast capability and the technology today," Visnews, which has been heavily engaged in international videoconferencing trials, is about to become one of the first organizations to launch its videoconferencing system on a global scale.

Mr. Paterson sees other developments in this field, including specialized videoconferencing studios in business organizations with high definition projection so that real eyeball-to-eyeball discussions can take place on a personal or group level.

"You need this clarity and definition so that you can watch the other guy's face to see if he's lying anything when he's talking at you," Mr. Paterson said. "The eyeball to eyeball is very important."

Entertainment and sporting events are two areas that have already benefited from satellite television to a limited extent.

People like Geoff Potts, of London's Satellite Express, one of the world's pioneering satellite television impresarios and consultants believe that in the future a whole new world of entertainment will open up.

Working with Saville Artist last year, he brought the world heavyweight boxing championship between Sugar Ray Leonard and Thomas Hearns live from Las Vegas to a packed London cinema.

Now he sees a whole new range of theatrical and sporting events that could be simultaneously transmitted live to all five continents, including possibly such items as Broadway opening nights.

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COMMUNICATIONS TECHNOLOGY

Viewdata, Teletext Systems Reach Era of Massive Sales

LONDON — One of the least published companies in the British system, the British Telecom Research and Development, has sold the British Telecom a million viewdata systems for public information and spare parts.

Viewdata and teletext are two communications systems using ordinary television sets or monitors.

communications systems using ordinary television sets or monitors pioneered just over 10 years ago by British Telecom Research and Development.

The user can look at pages of information on the screen generated by a computer.

Viewdata uses telephone lines and teletext transmits its information with a piggyback signal on top of ordinary commercial television broadcasts.

Viewdata can only be seen on a television set that has been specially modified with a decoding device costing about \$175 or else on a viewdata monitor built for the purpose.

Teletext can be received on any broadcast television receiver.

Viewdata is marketed in Britain by British Telecom as Prestel and, after a period in the doldrums, is developing rapidly as an interactive information system for business and home use.

Its main disadvantages, as pointed out in a recent study, "Prestel in Use," by Prof. E. Scott Haynes of Cornell University, are the costs for the home user (telephone line and "frame" charges), poor indexing and, sometimes, inadequate information.

Because of the cost factor, British Telecom has directed its efforts in the past to attracting the business user.

In spite of considerable investment and promotion, only 18,173 sets — the vast majority in businesses — were in use at the end of July.

Gateway System

But now, British Telecom is taking a leaf out of the West German Bildschirmtext trial Prestel service and has opted for what is becoming known as the Gateway system.

This important development means that the user can link his monitor to a number of different computerized databanks that can store millions of items of information.

This is the alternative to the rather limiting sources of Prestel information, which have come from commercial information providers who purchase frames from the operating company and in turn

charge the user each time he calls up the information on the screen.

Gateway will open up a new dimension for the British user and should mean lower costs if sufficient customers can be wooed by British Telecom.

Gateway will be able to offer some sophisticated features for the business user as it can be used as

an in-house or external system or a combination of the two.

As part of an additional campaign, British Telecom is negotiating with a financial institution, which it will not name, to provide direct banking facilities to 100,000 home users in a nationwide scheme.

The cost of viewdata has been a major impediment to mass development.

Mr. Fedida said he believed projects like Gateway and local network services should bring costs of terminals and other charges down to a minimum to help popularize their use.

"But it all takes a long time," he noted. "You must remember that viewdata and teletext have not been around for very long."

"After all cable television was begun more than 20 years ago, and you only have to look to see how far we have got with that."

Public Users Increasing

But services are beginning to spread, particularly throughout Europe where there are currently about a dozen operational systems, according to Carlo Vernim of the European Community.

Speaking at the New York Videotext Exhibition last June, he said there were about 50 million information frames available on videotext for viewdata systems and he expected the total number of public users to reach one million by the end of this year.

"Prestel for the People" is a campaign spearheaded by Britain's National Consumer Council to provide more services for ordinary users as well as to those in business.

The campaign offers a wide range of social information on legal and welfare rights and general consumer topics from Prestel sets in shops, post offices, public libraries and advice centers.

No charge is made for using the trial service, which is funded by the government.

France has provided free videotext sets to 2,000 households in another experiment, which provides three information services covering the stock market, weather and agriculture.

The users pay only for access time used via the telephone.

Several public broadcasting services provide subtitles for the deaf, such as Britain's Oracle and Ceefax services on commercial television and the British Broadcasting Corporation.

Sveriges Radio in Stockholm also does this and the Austrian broadcasting service carries subtitles in foreign languages as well.

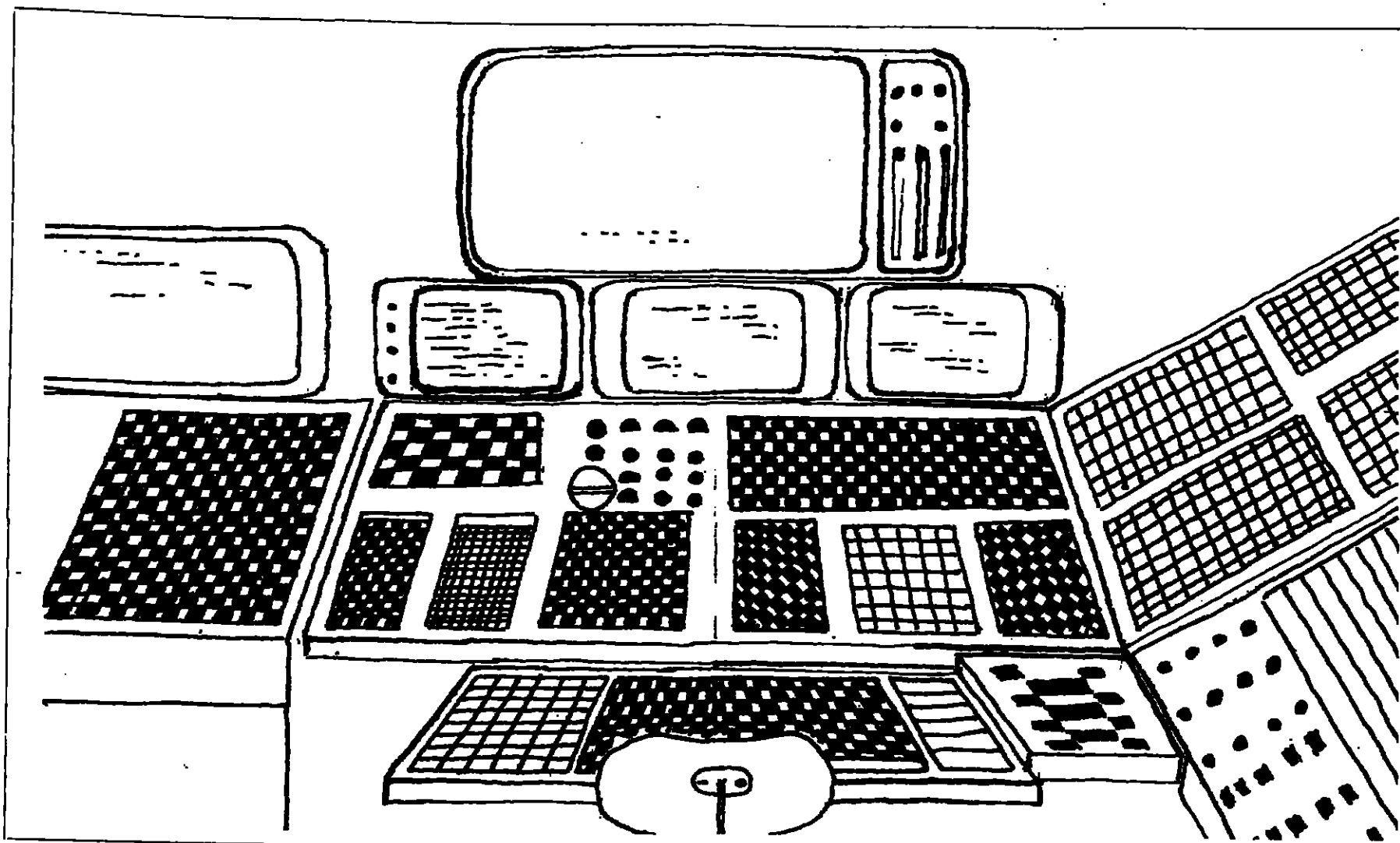
The United States, unlike Europe, has not fully entered the videotext stakes in spite of concentrated efforts by organizations like British Telecom to exploit the estimated \$12-billion market said to exist there.

But facing keen competition from the Canadians and the French, who have both developed their own versions of the British system, Prestel has made some progress in the United States where indigenous hardware development lags behind that from Europe.

However, the U.S. philosophy seems to find out first what kind of data the consumer needs before deciding on the best method of supply.

As a result, many of the best-known information providers like Knight-Ridder, Time Inc., CBS Inc. and Times-Mirror are investing heavily in the software side.

—MICHAEL FRENCHMAN



Water, water every where...



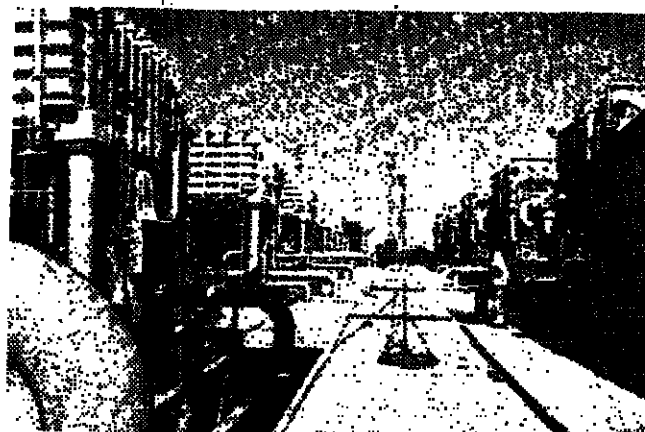
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WORLDWIDE VIDEOTEXT DEVELOPMENTS

A brief summary of some of the videotext developments going on in other parts of the world:

Australia: ABC has been using the British system for three years and has introduced advertising. Other experiments are being carried out by commercial stations in Sydney.

Austria: ORF is using British teletext services and the PTT has adopted Prestel.

Belgium: RTB uses the French Antiope system.

Brazil: Brazil has a packaged deal for 2 million Prestel sets from Britain.

Canada: The Department of Communications has developed its own Telidon system and Bell Canada's Vista is similar to Prestel's.

Finland: YLE has been using the British standard teletext since 1977. Because there are about 60 private telephone networks, more than a dozen variations of videotext are being tried out. One of the biggest trials is a joint operation of Telset between government and commercial companies.

France: France has two main services — Antiope and Videotel. West Germany: West Germany is one of the most advanced countries from a software point of view. Both television networks offer teletext and videotext with Prestel and Antiope. The Bildschirmtext is one of the best videotext services. West Germany also is one of few countries to draft videotext legislation.

Hong Kong: Hong Kong is expanding the British Prestel system.

Japan: Japan has its own Captains system. Language characters cause development problems.

The Netherlands: British Teletext and Prestel systems are in use. The PTT has its own Viditel service and a publishing group, VNU, claims its viewdata system was one of the first private services in Europe.

Singapore: Uses Prestel.

Sweden: Sweden was one of the first countries to adopt the British teletext system.

Venezuela: Venezuela purchased the Canadian Telidon system to use mainly for social information from public access terminals.

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Europe on Verge of Cable Television Revolution; Explosive Growth Expected

By Isabel Bass

ONDON — Last year, cable was a wire that engineers laid the ground.

Today, it is replacing diamonds and computers as the hottest new area of investment.

This is because Europe is now in the verge of a cable revolution as vast and far-ranging as the one in the United States, and the coming years promise an explosive growth in the facilities offered to Europe's more than 250 million television viewers.

As the anticipated deregulation begins, Europeans should be able to use their television sets for everything from voting and electronic banking to fire and burglar alarms, and the new channels to be offered will provide a plethora of programs to the Continent, which has up to now been served almost exclusively by state-controlled fare.

Technical terms, such as multi-cable and tree-structured systems, are now steeped in political and financial innuendos as cable enters these arenas.

Nevertheless, cable is still simply a wire connecting a center point and a home or office and cable systems are not new.

There are an estimated 600,000 operational networks in Europe, serving 25 million households.

Finland already has a 6-channel cable and pay system with a 12-channel capacity in operation.

But the networks, most of which are fairly small, were built to provide better reception of broadcast programs and are controlled by the state.

In the densely cabled Netherlands, for example, more than three-quarters of all cable TV homes are in networks of less than 500, administered by cable operators but effectively controlled by the state postal system.

But Europeans, from government officials and industrialists to ordinary viewers, seem to have realized the tremendous potential that multichannel communications can offer.

"The whole environment has moved full circle," noted Patrick Whitten of the British market research company CIT Research, Ltd.

"Governments are putting forward recommendations for new services," added Barbara Lodge of Satellite TV, Ltd., Europe's vanguard independent ad-carrying TV service beamed from space to cable companies.

Nowhere is the change in attitude more evident than in Britain, which is now racing to get wired up.

The eagerly awaited government report is now expected not only to give the go-ahead to multichannel cable TV in Britain but also to urge its speedy introduction.

For some here, the £2.5 billion scheme — which the minister for information technology, Kenneth Baker, compared to the building of railways in Victorian Britain — represents a major stimulus to the British industry.

Earlier this month, Rascal Electronics announced plans to supply equipment and distribute programs for the whole of Europe — one of the first firms seeking to conquer world markets with information technology products.

Other possible beneficiaries here include construction companies such as Rediffusion, fiber optic manufacturers such as BICC and GEC, and owners of franchises for Britain's current cable experiment stations such as Thorn EMI and Rediffusion.

The British governments' underlying assumption seems to be that the initial investment outlay of £300 for wiring up a house here can be recouped by adopting the pay-TV system, which means getting the public to pay for new entertainment programs.

This is a financing argument prevalent throughout Europe, with France, Switzerland, the Netherlands and most other European countries announcing or preparing to announce coming pay-TV services.

"These are seen to hold the only prospect of attracting funds on a scale required to finance national broadband cable networks," said Mr. Whitten, who heads CIT's forthcoming West Europe cable TV study.

One snag is that European viewers may be neither as eager nor as able as their U.S. counterparts to pay for more entertainment.

This is because the video boom has already provided entertainment enthusiasts with an easily accessible library of Hollywood material, and the cost of mandatory television licenses such as in Britain are considered enough of a dent in the household budget.

The major hitch in what is hoped will be the explosive growth of channels serving Europe is that it might be rejected by the public. It takes more than investment money to convince people to purchase new products — especially in

Numbers of Subscribers to Cable TV Systems

Country	Number of Subscribers 31.12.1981	Penetration % of homes	Number of Subscribers 31.12.1972	Remarks
Argentina	Not Known	—	10,000	
Austria	250,000	2.5*		
Belgium	2,410,000	89.3*	327,473	About 45 Systems
Canada	4,050,000	53*	1,398,469	
Denmark	800,000			
Finland	152,000	50**	10%	About 60 Systems (Helsinki: 72,000)
France	Not Known		80,000	Several Thousand in Small Systems (Metz)
Ireland	166,000	23*		
Germany (Fed. Rep.)	6,600,000	35*		
Luxembourg	65,000	50*	6,053	
The Netherlands	2,100,000	66*	50,000	
Norway	250,000**	23*		
Sweden	1,400,000**	46*		
Switzerland	1,000,000	50*	75,000	A.S.E.A.
Britain	2,640,000	14**	1,800,000	
United States	(31.12.1977) 23,220,000	25*	6,085,532	About 4,600 Systems

* % of licensed TV sets

** Council of Europe figures (31.12.1977) - (JMM-ME (78) 3)

Origin of figures: ATA, RTD, ACTC, Helsinki Cable T.V., CTA, Coditel, VECAL, ASEAC, NCTA, Kabel TV Vienna, Council of Europe.

Source: International Alliance for Distribution by WIA.

times of economic recession. For nearly a year now, some Londoners have had the possibility of signing up for Showcable, an experimental pay-TV service covering part of the London area.

In spite of door-to-door campaigns, only 30 percent of existing cable subscribers joined, and hardly any non-cable households were

wooded into being wired up. Showcable's director, Allan Hill, explained that prospective subscribers found it hard to fork up the roughly £10 a month plus £25 connection fee.

A major task, he said, would be to educate people about cable. Such results have contributed to the financial community's wariness about leaping into cable. In fact, the feeling is spreading here that there will be few quick killings in the field despite the government's enthusiastic attitude. Still, the unexpected explosion on interest continues. Governments are beginning to see the political mileage that cable can bring. Bankers are starting to see numerous sources of

creative financing open up as regulatory issues are hammered out. And broadcasters are realizing that cable might help them replenish their fast-eroding funds. The only element apparently lacking for the growth of cable TV in Europe seems to be the consumer, who will probably be calling the shots for the first time in a long while.

France Begins Experiment With 'Viseophone' System

BIARRITZ, France — Around the middle of next year, French telephone authorities hope that people here will begin stowing their telephones in the closet.

Instead of using those humdrum instruments, the officials hope, selected customers will employ their new picture-phones — or, to use the term the French are promoting, "viseophones."

The viseophones are the most exotic part of the "wired city" experiment France is conducting here as a showcase of its fiber optic equipment and a test of what kind of services people will pay for.

Beginning in mid-1983, 1,500 subscribers, mostly households, are to be connected to a network of fiber optic cables providing viseophone service, high fidelity sound, cable television and the chance to order films and a variety of other shows from a "bank of programs."

The viseophones, made by Thomson-CSF and Societe Anonyme de Telecommunications, combine a telephone with a 10-inch color screen for viewing the other party, and a videotape terminal that can be used to summon information from a distant computer.

As a precaution against breakdowns, old telephones will remain in the subscribers' homes, but officials hope the standard phones will be kept out of reach to encourage use of the viseophones.

People in France definitely want more TV programs, says Jean-Joseph Wanegre, a marketing official for the French Telecommunications Authority. What other services they will pay for is harder to predict.

The charges to customers will not reflect the full cost of the system, which will be far too high to be profitable on such a small scale, but Mr. Wanegre says the trial will give some indication of the demand for various services.

French officials say they chose this Atlantic coast resort of about 30,000 year-round inhabitants because it is about the right size for such a trial and because the hilly terrain makes it hard for certain parts of the town to get good TV reception.

Authorities in West Germany, Japan and Britain also are testing fiber optic networks for home subscribers, but French officials say theirs is the largest experiment.

— BOB HAGERITY

Europe: The Nationalistic Approach Wins Out Over Collaboration

(Continued from Page 7S)

ment plan that is expected to be released over the course of the next few months.

Turnover Increases

The French electronics industry increased its turnover by 16 percent to 83.2 billion francs in 1981, with exports accounting for 32.3 billion francs — but there is a troublesome trade deficit of 1 billion francs. Although the French have a strong base in professional electronics and telecommunications, imports exceed exports for active and passive components; radio and television; hi-fi and stereo

sets; test, measurements and control equipment and automation, computer and office machine equipment. The French goal is to export 50 percent of their electronic equipment by 1985 and reduce the trade imbalance with the United States and Japan.

The previous French government established a strong telecommunications industry and the French are completing an advanced digital telecommunications network. They have a technical lead in areas such as digital switching, public packet networks and new telematique products and have defined some international stand-

ards and protocols. At the same time, despite numerous efforts, they have failed to produce an internationally competitive computer components or instrumentation industry.

There is a substantial difference in the Socialist approach to telecommunications. The last government, for example, planned to give everyone in France an electronic directory to replace expensive paper directories. While this idea is now portrayed as dictatorial, it solved the formidable problem of getting a multipurpose terminal to the consumer and provided the production capacity to penetrate ex-

port markets. The Socialists want to give the consumer the right to choose either directory, which will substantially reduce the production volume.

The Socialists also want to be more "democratic" in their approach to exports. A code of conduct is being formulated by the government to govern trade deals with developing countries. Presumably companies exporting telecommunications equipment will be asked to take a more egalitarian approach — taking technical requirements and financial means of the purchaser into consideration rather than just the bottom line.

"The user is extremely important and, although we won't alter our thrust into digital communications, the key to development is voluntary participation in our programs," said Jacques Dondoux, director general for telecommunications, noting that the French will introduce itemized telephone bills and smaller paper directories because of user demand. "We must reduce the cost of equipment to provide reasonably priced telecommunications networks to the developing countries which represent the future growth market."

The Socialists are also increasing their public research and devel-

opment budget by 17.2 percent annually until 1985 and laboratories concentrating on electronics are expected to get a large slice. Training "through research" will be stressed to remedy the lack of engineers. In addition, nationalized companies are required by a law passed July 15 to increase their research and development budgets by 10 percent and private companies by 6 percent.

There will be an increased effort by public organizations, such as the Agence de l'Informatique (data-processing agency) to increase computerization of France. (Continued on Page 12S)

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COMMUNICATIONS TECHNOLOGY

Demand Outstrips Capacity Of Cable TV Systems in U.S.

By Terry Gross

NEW YORK — U.S. cable television executives are discovering that the recent growth of their industry, which was so astounding that even they were surprised, is going to be a tough act to follow.

From being what one observer called "the hottest ticket in Media-ville," cable television now faces a number of problems, most of them directly related to its success.

Cable's revenues totaled \$3.3 billion in 1981, and analysts expect that to climb to about \$4.4 billion this year. Cable now serves 28 million households in the United States out of a total of about 85 million with television sets. New subscribers are being added at a rate of 250,000 to 300,000 a month.

At that clip, by 1985 cable will reach nearly half the homes with television in the United States. New subscribers are not the problem.

Cable has received so much publicity that almost everywhere cable does not now penetrate, it is eagerly awaited. No wonder, considering what is available.

Services Offered

At a bare minimum, a cable salesman can knock on any door in any town and offer at least some of the following basic program services: Cable News Network and a number of others providing news 24 hours a day; ESPN, 24 hours a day of sports; Financial News Network; ARTS; The Weather Channel; Nickelodeon, a 13-hour-a-day service for young people; Black Entertainment TV; SUN Television Network, Spanish-language programming; National Jewish Television; Christian Broadcasting Service; ETERNAL Word TV Network, and about 30 others.

In addition, and for a little more money each month, viewers can get Home Box Office or The Movie Channel, both featuring first-run movies; Showtime; Superhighway of the Month, Escapade/Playboy and Eros, featuring adult entertainment, and a number of others.

New programming is not the problem either.

Perhaps a dozen of the 47 services now available have begun this year.

The industry's problems fall into three categories: Cost, competition and customer service.

In addition to the ever-increasing cost of building new cable systems, the industry is equipment-dependent, and new equipment is expensive.

Large costs entail large debts, and high interest rates have proved painful for the cable industry.

"Cable is in a very expansionist period," said Mara Miesnick, an analyst who follows the industry for Smith Barney, Harris Upham.

"As a result, earnings of most of the companies have been depressed."

She said that "many companies showed 40 to 50 percent growth until last year," and added that right now it is a question of "when profitability is going to catch up with subscribers."

"Any of these companies, if they cut off capital spending, could turn on the cash-flow faucet immediately," she said.

Most, however, are committed to major building projects.

For example, Cox Communications Inc., which operates Cox Cable Communications, the fourth-largest cable supplier in the United States, currently is developing systems in New Orleans, Louisiana; Tucson, Arizona; Libertyville, Illinois; Michigan City, Indiana; Great Neck, New York; and Vancouver, Washington.

The company's cable assets — equipment, etc. — surpassed its television broadcasting assets in 1977, and grew about 25 percent in 1978, 33 percent in 1979, 36 percent in 1980 and a whopping 55 percent last year.

In addition, Cox's capital spending increased by almost 50 percent in 1980 and 83 percent last year to \$141 million.

With industry construction costs rising all the time — sometimes exceeding \$1,000 each new subscriber — and systems taking longer and longer to build, the amount of new cash needed is enormous.

Franchised Operations

Cable also is a franchised operation; each municipality grants a franchise for someone to come in and wire the town or city for cable. To win the franchise, cable operators have to pay an annual fee that cuts 5 percent off the top of their income and also have to provide whatever the municipality deems to be the going amount of community service — free access channels for the people, intergovernmental video hookups, production facilities costing millions of dollars and so on.

As a result, some cable companies are walking away from lucrative areas.

Warner-Amex and Time Inc.'s American Television and Communications both refused to submit bids for the Sacramento, California, franchise because of a clause in the agreement that would allow the city to buy the system after 15 years at book, rather than market, value.

Growing Competition

Cable operators say that higher construction costs and interest rates, combined with lower revenues because of the franchise obligations and fees, means less money to fight growing competition.

"We have gone from a period when there was television only to the so-called Buck Rogers era in which cable was conjured up as the only delivery method," said Ed Dooley of the National Cable Television Association in Washington.

"Then suddenly came the competition."

Cable was making so much money, it was just a question of time before competing delivery systems, new ways of getting the entertainment and information to the television set, would emerge.

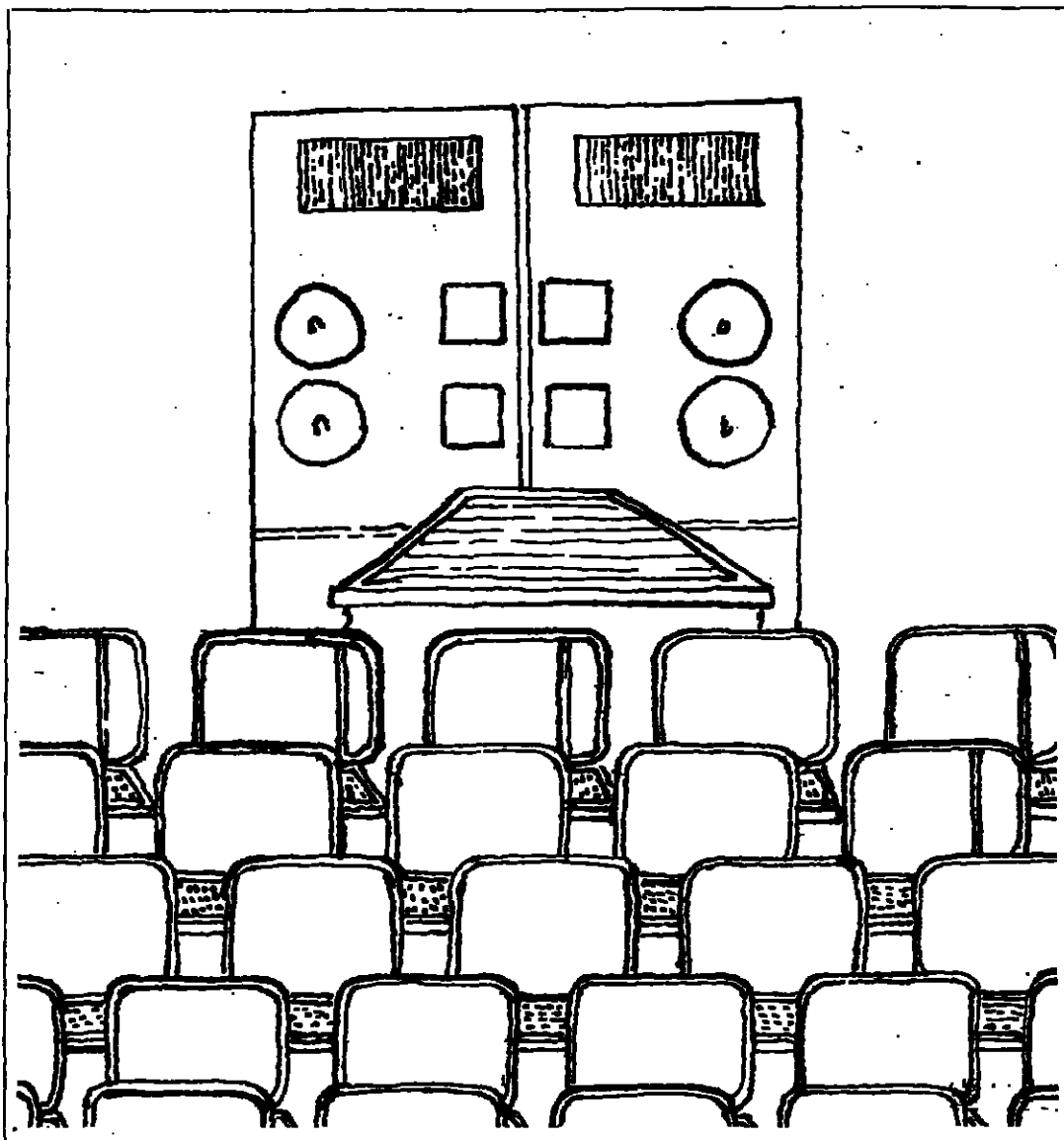
"The general view in the marketplace is that cable is under attack," Mr. Dooley said.

The attackers sound like an alphabet soup — STV, SMATV, MDS, DBS and LPTV.

Quickly defined: STV (subscription television) beams a single program signal from a broadcast television station via a satellite to homes in a much larger region than is available to normal broadcast; SMATV (satellite master antenna television) operators put dish antennas on the roofs of large apartment complexes, capture a variety of movie and sports channels and sell them to the residents in the complex; MDS (multipoint distribution system) delivers signals over the land via microwave relays rather than cable; DBS (direct broadcast satellite) sends program material directly from a satellite; and LPTV (low-power television) sends pay programs over small areas.

They all have one thing in common: They want a bite out of cable's market.

Not all of them are operational



yet, but industry observers agree they will all find a niche in the market.

Most said that niche would eventually settle at 20 percent of the United States that cable will never reach because of inaccessibility.

"In 1992," Mr. Dooley said, "you'll see an industry [cable] that emerges as the major delivery system sharing the market with DBS, STV and the rest."

Customer Dissatisfaction

The last of the industry's three big problems, and the one that will only get bigger as cable grows, is customer dissatisfaction.

"As a result of the tremendous growth that we've had," said David Anderson of Cox Cable, "there hasn't been enough attention to customer service and maintenance."

What has tended to occur is that a cable system was put in place, sold and a small office handled the operation.

There has been little maintenance and few people are there to answer complaint calls.

The computers that do the billing have not caught up with the many new program services being offered and to complicate matters, in most cases all the bills are sent out at the same time each month.

Billing errors mean telephone calls to the office.

Because of the billing method, all those calls come in at once.

"We realize this is the case," Mr. Anderson said. "And as a result, we're doing more."

Despite the growing pains, cable's future looks bright in the United States.

Jim Fannan of United Cable,

the Colorado-based operator of 39 systems totaling 500,000 subscribers, said: "We do expect substantial, sustained growth over the next few years."

"It is, in a way, in its formative stages," said Ed Dunleavy, who follows a number of cable companies for Salomon Brothers.

"Technology doesn't seem to be catching up with man's imagination yet," But echoing a general sentiment, he added, "On a longer term basis, I'm very positive on the industry."

Said Mr. Dooley of NCTA: "Cable is the only unlimited spectrum [for programming]. It is the only service free of interference. People don't really care how they're getting the programs. What they really care about is a clear signal and whether they get what they want to watch."

Fiber Optics Growth Tied to Home Market

(Continued from Page 75)

changes. Aside from being lighter and thinner, fiber optic cables provide a better signal and need fewer repeaters to nudge the signal down the line.

But fiber optics will not have the field to itself, and depending on the project, satellites, microwaves or copper cable can offer lower costs.

When a new trans-Atlantic cable is installed around 1988, however, fiber optics will almost certainly be the choice. Several companies, notably STC, the British unit of International Telephone & Telegraph Corp., are refining their submarine offerings in anticipation of such orders.

In July, British Telecom opened a 127-mile (204-kilometer) fiber optic link between London and Birmingham, calling it as the world's longest. BT predicts that by 1990, about half of Britain's 12,500 miles of trunk telephone circuits will have been rewired with fiber optics.

In the biggest U.S. fiber optic project, American Telephone & Telegraph Co. is installing the cables along the dense corridor between Boston and Washington.

Difficulties for Japanese

The Japanese do not intend to be left out. Sumitomo Electric Industries Ltd. said it may set up a joint venture in the United States to produce fiber optic cable. Without a U.S. plant, the company might find it difficult to win major telecommunications orders because political pressures to develop the technology at home are strong.

Last December, Fujitsu Ltd. complained that such pressures prevented it from winning a \$75-million order for part of the Boston-Washington link.

The Japanese company said it made the lower bid, but AT&T gave the contract to its Western Electric subsidiary, citing "public interest."

The military is probably the biggest market for fiber optics outside of telecommunications. In aircraft, for example, fiber optic wiring offers advantages because it is light and immune from electromagnetic interference.

Among other uses believed likely to grow are linking big computers, wiring industrial control equipment and transmitting cable TV.

Although the big telephone projects are likely to go to established suppliers, short-range networks for business and industry offer "quite a lot of room" for new companies to innovate, says David Flint, a consultant at the London firm of Butler Cox & Partners.

One company pursuing that market is Hytran Products, a unit of Filkington P.E. of Britain. Hytran, which supplies cables and accompanying electronic devices, says sales will total only \$750,000 in 1982 but are likely to grow about 75 percent annually over the next few years.

Another British company using fiber optics is Mercury Communications Ltd., jointly owned by Cable & Wireless Ltd., the British Petroleum Co. and Barclay's Merchant Bank. Mercury plans to lay fiber optic cables along British Rail tracks as part of its phone and data transmission network, a project that will compete with British Telecom for business customers.

When, or whether, fiber optic cables will branch into the home is something most analysts decline to predict.

Writing up homes with fiber optics would create an enormous market, but present networks are adequate for carrying phone signals and television.

Most analysts say fiber optics will be economical only if a big home market develops for computerized shopping and banking, picture-phones, or services allowing people to tell their TV sets what program or information to send next.

Will demand be high and costs low enough for such services? Yes, says Frank Dixon, an analyst at Gnostic who sees the home market as the fastest growth area for fiber optics in the 1990s.

Other analysts have their doubts that people will pay for a deluge of information and entertainment, but Mr. Dixon insists: "This is not just blue sky. A lot of people are betting on it."

Since this is the telephone system of the future, the future must be here.

Today, a lot of countries are wondering what kind of telephone system they'll need in the future.

But some countries aren't wondering anymore. They already have their future telephone system in place.

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It's called System 12™ and the Deutsche Bundespost recently installed it for a trial run in the cities of Stuttgart and Heilbronn.

This makes Germany the third country (Belgium and Mexico are the other two) to have these exchanges in operation.

What makes this such important news?

First, because more and more countries are recognizing that System 12—with its fully digital switch—is the way all telephone systems will be one day.

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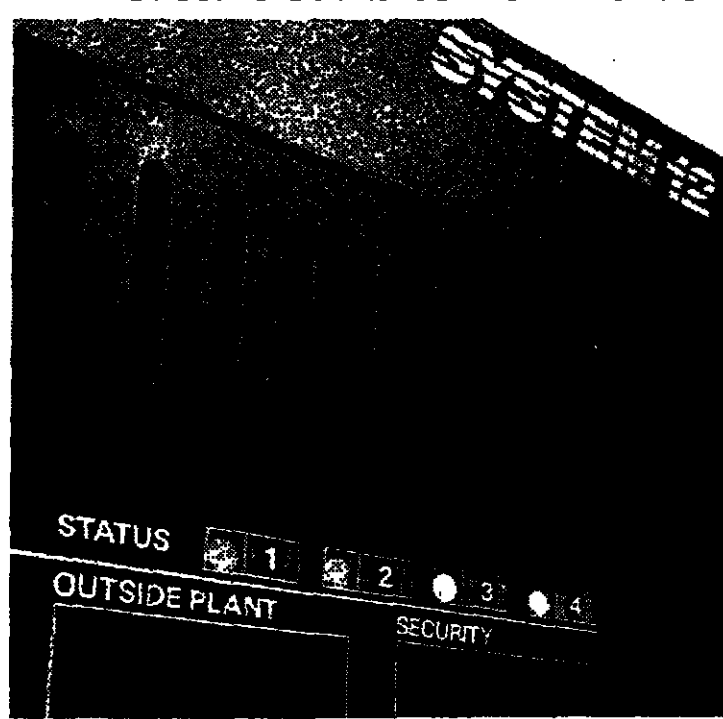
Something only System 12 can do.

What's more, System 12 can incorporate new technology as it comes along—so it's always up-to-date.

One reason why over 2,250,000 equivalent lines have been ordered or installed in countries around the world.

Countries like Belgium, Germany, and Mexico, who don't think they should have to wait for the future.

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ITT's System 12, a revolutionary new telephone system, is up and running in Belgium, Germany, and Mexico.

SYSTEM 12 ITT

COMMUNICATIONS TECHNOLOGY

World Telephone Systems: Toward an Integrated Switched Digital Network

By R.J. Raggett

LONDON — As computer and communications technologies converge, the conversion of the world's telecommunications network toward a fully integrated switched digital network will play an important role in the formation of a comprehensive information system.

Such an information system will enable society to effectively and comprehensively obtain whatever

information it needs for business, social and individual functions and will have even more dramatic effects on society as a whole than those created from the technologies of the industrial revolution.

It will move the industrialized societies of the developed world into the new post-industrial era of the information society, where the production of information plays a more important role than conventional industrial production.

The computer, in the form of the microprocessor, has made it possible to process and store, at an ever diminishing cost, vast amounts of complex information that could not be handled by conventional means.

And the development of the microelectronic silicon chip has opened the way for the combination of computer and communications technologies.

The conversion of the world's

telecommunications network, with its 500 million telephones, toward a fully integrated switched digital network in which any form of information — voice, data, images or color pictures — can be represented and passed through the network in the form of groups of coded digital pulses is the next step.

After just a dozen years, the realistic goal now exists for the creation of a network on which voice and all conceivable non-

voice services will share common switching and transmission facilities and do so in a cost-effective way.

The world's first telephone switch operating in this digital rather than traditional analog mode went into service in 1970 in the town of Lannion in France. The switch was developed by the French company CIT-Alcatel, which, amid much international skepticism, took the brave step to launch its new E-10 exchange while the rest of the world was in the early phases of analyzing the technical and economic implications of this technology of the future.

To get some idea of how early the French were, it was not until January 1976 that the Bell System's first digital switch went into service in the United States (the No. 4 ESS) and not until May 1979 that Nippon Electric of Japan installed its first NEAX 61 digital exchange.

Even now, although they would rightly claim that their technology is more advanced than the original E-10, major telecommunications companies like Siemens AG of West Germany and the British companies involved in the System X switch development have only been installing digital switches within the last 18 months.

Many Advantages

The advantages of digital switching in conjunction with digital transmission are no longer debatable.

With the exception of the local subscriber switches, capital costs are on a par or lower than analog switches and, because maintenance costs are much lower, digital switches provide a much more attractive life cycle cost figure.

Digital switches also require far less space per line than electromechanical equipment — about 250 racks of conventional crossbar equipment can be replaced by just 15 racks of its digital counterpart. Maintenance is simplified.

Besides being able to integrate services, digital switches allow for a new range of subscriber services. The subscriber benefits by an improved standard and quality of service, as well as by speedier service as there is no switching delay in the exchange.

But it is not just a simple process of out with the old and in with the new.

Telecommunications administrations have a massive investment in analog technology and although a large number of them are now firmly committed to "going digital" the cost of modernization, while at the same time meeting demands for new lines and services, is extremely high. British Telecom, for example, is investing about \$3.4 billion a year in modernizing and expanding its network, but even so, its network still will have some analog switching at the end of the decade.

Major Problems

There are also major problems for the manufacturers.

Even with the new component technology, the development of a digital switch has proved a very difficult process, particularly in the area of software for computers.

It was recently estimated by Philips that a complete range of digital switches requires an estimated 5,000 man-years of development work or an investment of about \$450 million.

Since standards vary from country to country, adaptation of the exchange for foreign markets together with software support dur-

ing the life of the equipment demands another \$450 million.

By the time the capital cost is added, each system developed costs about \$1.8 billion.

This means the money to be made on each line of equipment sold, simply to cover development costs, has become 400 to 500 percent greater than with electromechanical equipment.

This, inevitably, requires that more lines be sold during the economic life of the system.

But, at the same time, technology now is advancing more rapidly, so that the economic life of each system is reduced.

In Europe, for example, no one manufacturer has a home market large enough to cover an initial cost of this magnitude without imposing unreasonably large tariffs on the users.

So, export orders must be won in competition not only among the Europeans, but also the United States and Japan.

Add to this the complication of "buying into markets" by some companies in the belief that once their system is accepted it will result in automatic follow-on business, and a degree of governmental support for the companies of some countries, and it can be seen that it is a very difficult market in which to survive.

The insistence by many Third World governments that contracts for digital switching equipment include a partnership with a local company and full local manufacture is an additional complication for Western manufacturers.

Ordering Systems

A further peculiarity of the digital switching business is the apparent willingness of customers to order systems still in development and often several years away from production.

As a result, lines on order greatly exceed those actually installed by most companies and, in some cases, lines on order never get installed.

However, this peculiarity has become a way of life in the business, and the one notable group that has consistently refused to sell on this basis, the British companies in-

cluded with System X, so far have achieved no export business.

Now that the System X switch is installed and operating successfully in Britain, the suppliers are confident enough to quote for export orders, they find that many potential customers already have committed to other suppliers, some of whose systems still have to be proven operationally.

There is a further complication in quoting figures of lines ordered as it is possible to argue that some digital exchanges are not fully digital since, generally for economic reasons, they contain some analog elements such as, for example, reed relay subscriber switches.

It also is difficult, in some cases, to determine whether or not some orders are firm contracts or simply expectations of business from a committed administration.

Lines on Order

Without entering this debate, there is no doubt that by far the most successful company to date has been CIT-Alcatel.

It has 3,222,460 lines in service — 2,757,280 in France and 465,180 in other countries.

The other major French company, Thomson-CSF, which began development work on its MT range of switches in 1977, has received orders for 3.6 million lines, including the 600,000 lines destined for countries outside France.

To date only a small percentage of these lines have been installed.

Most successful in terms of export business is the Swedish company L.M. Ericsson, in partnership with Philips, which scored a notable success with its winning and implementation of the massive expansion and modernization of the switching equipment in Saudi Arabia.

Among other European companies, Siemens of West Germany has orders for about 600,000 lines of its EWSD equipment and has just completed the installation of four trial exchanges in Germany prior to an expected serial production order from the German Bundespost in 1984.

The Bundespost also is evaluating exchanges supplied by Philips (PK, XD) and ITT (System 12) be-

fore committing itself to the adoption of one or more systems.

In Britain, British Telecom has ordered 22 System X exchanges, with further substantial orders due over the next few years, while in the United States, Western Electric continues its major production program for the Bell System.

AT & T International also is establishing itself rapidly in many parts of the world and is likely to be a major competitor against the Europeans and Japanese.

Northern Telecom of Canada has achieved an estimated order level of about 52 million lines, while the leading Japanese supplier, NEC, has orders of nearly 4 million.

Of the remainder, ITT, selling its System 12 exchange through its multinational organization, has estimated orders in excess of 1 million lines, approximately the same level of business as its fellow U.S. company GTE.

Of course, digital switching will not be of full benefit to the user until the whole digitalization process has been completed.

However, as digital exchanges are installed, there will be progressively better service with higher quality connections.

There will be a degree of verbal guidance from some exchanges with an ever-increasing range of user services.

Call storage will come and, toward the end of the century, a range of useful visual services.

The main technical problems left to be solved are economic. There are few actual technical problems that have not been solved in some way, but many of the solutions remain too expensive.

There will be casualties among the manufacturers. One TRW Vindicator of the United States already has disappeared, and the market certainly will not support the number of companies currently in the business.

Politics, too, will play its part in determining the speed and degree of implementation of digital technology; but the ball already is rolling too quickly for the inevitable evolution of information technology to be halted.

Europeans Opt for Nationalistic Approach To Developing Communications Industries

(Continued from Page 10S)

and the World Center for Computer Sciences and Human Resources has launched a number of programs involving personal computers. The latter, employing a number of scientists from the Massachusetts Institute of Technology, has been called "a stalking horse for the French electronics industry" by one U.S. senator. Two laboratories in Grenoble, the CNET and the LETI, will be the center of microelectronics development.

The major question in France at the moment is the ongoing reorganization of the country's components, computer and communications manufacturers. CIT-Alcatel and Thomson-CSF will remain the important industrial poles in telecommunications; Cii Honeywell Bull will be the foundation of the computer industry and the industrial structure of other sectors is slowly being defined at a pace that is delighting French competitors. Within the country there is likely to be an even greater insistence to "buy French."

Foreign firms are watching the French movements with great interest. The nationalization of the International Telephone and Telegraph Corp.'s French subsidiary, CGCT, has virtually cut ties with the parent company and the government killed an initiative to set up a marketing operation in the United States between Thomson-CSF and Continental Telephone Corp.

Foreign Participation

Some foreign companies are attempting to participate in national programs and protect their market shares — gambling on a pragmatic approach. But the French government recently refused to allow Apple to locate its European software headquarters in Paris because they wanted a facility to produce the hardware. Most observers expect heightened nationalistic tendencies — unless the technology gap forces the French to come to terms with American companies, particularly in the area of integrated circuits.

"The French concepts are very good but if some of their compa-

nies aren't competitive on an international level in two years the government will be faced with endless expenditures," predicts Barry Cox, vice president and general manager of Intel Europe.

The ambitious French approach also calls for increased European cooperation but most of the manpower and funds will obviously be spent on the national programs. However, suggested Mr. Donckers, "perhaps we can use the former ITT subsidiary as a foundation for a pan-European telecommunications company."

The United Nations designated 1983 as 'World Communications Year,' but it appears that nationalistic attitudes will prevail in Europe — preventing the Europeans from competing in unison with the large production runs and product standards that permit competitive prices. Although it will be difficult for European countries to each establish their desired technological independence, this costly approach, influenced by the exaggerated example of the French, will continue to be the trend.

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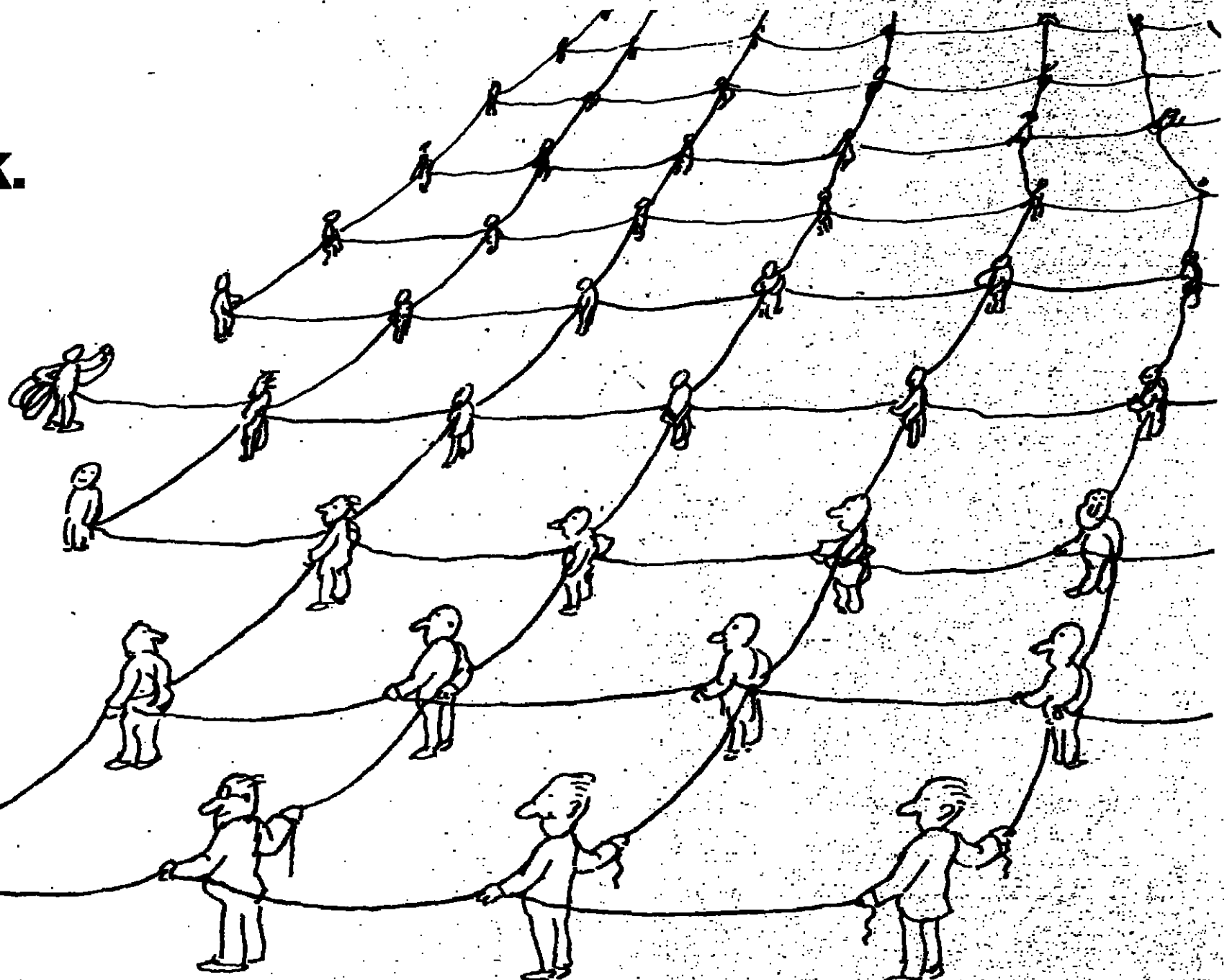
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SCIENCE

The Selling of 'Artificial Intelligence'

By Andrew Pollack
New York Times Service

NEW YORK — Artificial intelligence, the science of making computers "think" has long been the preserve of theoreticians who were little concerned with practical applications.

"When they said real things, they meant computers that can play chess," said Roger Schank, chairman of the computer science department at Yale University.

They were not going to talk to Wall Street, let alone own a suit.

Now, however, business is taking an interest in artificial intelligence, known as AI, and some professors, such as Professor Schank, are forming or joining companies to capitalize on the expected boom. But the new move toward commercialization is disrupting the academic community and provoking fears that university research will be hurt.

Some researchers welcome the business interest. Others, however, complain that corporations are outbidding campuses for scarce personnel, and that work is being diverted from long-term research to short-term problems with immediate application. They also say scientists are becoming more reluctant to share research results.

"We perceive there's a real potential for the existing quality of AI research to diminish," Ron Olander, who coordinates such research for the U.S. Defense Department's Advanced Research Projects Agency, said during a panel discussion at the National Conference on Artificial Intelligence in Pittsburgh last month.

Artificial intelligence is concerned with making computers do things that are said to require intelligence when people do them. Commercial interest is centered on four areas:

• Vision systems, which would allow computers to interpret satellite photographs and allow industrial robots to identify objects coming down the assembly line.

• Natural language systems, which allow people who do not know computer languages to get information out of computer storage by asking for it in plain English.

• Expert systems, or computer programs that mimic the behavior of human experts such as doctors, who can do such things as diagnose diseases and interpret geological data in exploring for minerals.

• Equipment and programs used by AI researchers themselves. Xerox and two new companies, Symbolix Inc. and Lisp Machine Inc., sell computers especially designed to handle Lisp, the programming language used by artificial intelligence researchers.

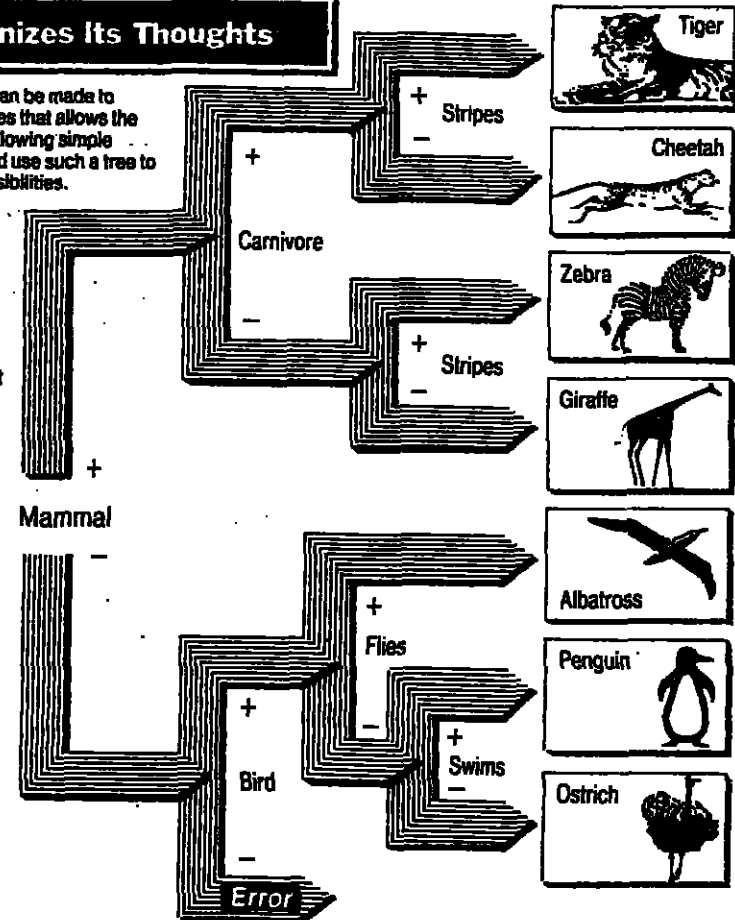
Several large companies such as Schlumberger, Hewlett-Packard, Digital Equipment and Texas Instruments have formed artificial intelligence research groups to design products for internal use and perhaps for outside sale.

Schlumberger, for instance, hopes to have expert systems interpreting data from logs of oil wells. Digital uses an expert system to help package computer systems.

How a Computer Organizes Its Thoughts

A decision tree is one way a computer can be made to "think." The tree is an orderly set of rules that allows the computer to reach a conclusion. The following simple illustration shows how a computer would use such a tree to identify an animal from a number of possibilities.

First, the computer determines if the animal is a mammal. This example assumes the computer can answer that question either by carrying on a dialogue with a person at a terminal, or by being able to analyze various pictures of animals with a camera eye. If the animal is a mammal, the computer decides if the mammal is a carnivore. If it is a carnivore, the machine looks for stripes to choose between a tiger and a cheetah.



and is developing a program to diagnose broken computers. RCA Government Systems and Lockheed's Emco division advertised at the Pittsburgh conference for people to form AI groups.

More companies are being started, many of them drawing people from university research programs in a phenomenon similar to the one that occurred when genetic engineering was commercialized a few years ago.

Professor Schank, for instance, formed Cognitive Systems, which will sell natural language systems. It is designing a system for oil companies that will retrieve information on oil wells using plain English commands. Professor Schank plans to develop computer programs that can do such things as give advice on taxes or wills.

Edward A. Feigenbaum, a computer science professor at Stanford University, has co-founded two companies — Intelligent Systems, which aims to apply artificial intelligence to genetic engineering, and Teknowledge Inc., which designs expert systems for other companies. Teknowledge is designing a system for Elf-Aquitaine, the French national oil company, to diagnose why a drilling bit gets stuck during drilling.

Such university spinoffs have led to strains. The staff of the AI laboratory at the Massachusetts Institute of Technology was decimated in 1980 when more than a dozen researchers left to form Symbolix. The company sells computers designed for artificial intelligence that the researchers developed while at MIT. The only two staff researchers who did not join Symbolix left MIT to form Lisp Machine, a competing company.

Next Generation

"We took so many that it's going to take years for MIT to build back up," conceded Russell Nofziger, president of Symbolix and former director of the artificial intelligence lab.

Marvin Minsky, an MIT professor who is considered a founding father of artificial intelligence, lamented: "Most AI labs cannot buy the machines they had a hand in designing." He also fears that universities will lack resources to develop the next generation of machines.

The commercial activity might have some benefit for universities, however. If artificial intelligence is considered commercially important, corporations might finance university research. Carnegie-Mellon University has signed on several corporate sponsors for its robotics laboratory.

Also, the rise of the companies might make it easier for people who want to concentrate on basic research, because pressure from government sponsors for practical results would be eased.

Different Cultures

Some of the uneasiness in the university community stems from a difference in cultures. Academic researchers consider products coming out on the market as unsophisticated and oversold.

"I don't think they have anything to do with artificial intelligence — they have to do with artificial intelligence of 10 years ago," said David Waltz, professor of electrical engineering at the University of Illinois.

An example often given is that of expert systems, the programs that can diagnose diseases or help explore for oil. Although the computer programs are fairly adept at making analyses, they cannot learn from experience. Given the same set of symptoms, for instance, an expert system will make the same diagnosis twice, even if the first one proves wrong.

"If you don't have an expert that can learn and have memory, you get a little anxious," said Pro-

fessor Schank, adding that expert systems are going on the market prematurely. Yet his company is often cited by others as an example of one that over-promotes its products. Cognitive Systems' literature advertises that the company develops systems that offer "all the benefits of having a human expert on your staff, but it never takes a lunch hour or goes on vacation."

Those entering the business say it is impossible to wait indefinitely for technology to be perfected before introducing it commercially. Lee Hocht, president and chief executive officer of Teknowledge, said there are many applications — from electronic circuit design to diagnosing nuclear power plant accidents — in which existing expert systems could save companies millions of dollars.

Besides the question of how sophisticated their products are, new companies may face a bigger stumbling block — lack of skill in managing a company and in focusing on specific market areas. They must also hang on until the market develops further and then face competition from the more established companies.

The same problems afflicted genetic engineering companies formed by professors. For lack of management talent, money or products, many have fallen on hard times. Artificial intelligence "is even more university-bound than genetic engineering," said one analyst. "Some of those guys can't manage their way out of a paper bag."

Helping Children to Endure Hospitalization

By Jane E. Brody
New York Times Service

MINNEAPOLIS — Five-year-old Alice, a cancer patient at the Minneapolis Children's Health Center, was taking her dolls for a ride in a wagon. "Where's everyone going?" she was asked by a child-life specialist. "Just for a ride," Alice replied. "But my dolls are sad because they'll never get to go home."

This was Alice's way of saying she thought she would never go home. The remark opened the door to a discussion with Alice about the realities of her situation, which were quite the opposite of what she had imagined.

Admission to the hospital is not only a pleasant experience, but for children a hospital stay often produces emotional trauma that leaves long-lasting scars.

Studies have shown that children under the age of 5 usually experience emotional difficulties, including resumption of bed-wetting and a fear of strangers, following even a brief hospital stay. For older children, hospitalization for more than a week often results in such psychological disturbances as heightened aggression, increased anger and greater difficulty in learning.

Depressed adolescents who commit suicide are more likely to have been hospitalized early in life than depressed adolescents who don't. A child who enters the hospital at a psychological disadvantage, such as having only one parent, is four times more likely than others to suffer emotionally afterward.

These findings, and the recognition that emotional factors are often critically important to physical recovery, prompted the Minneapolis center to build a new institution and develop new patterns of care specifically designed to meet the emotional as well as medical needs of young patients.

Training Course

All staff members at the center, including kitchen personnel, must take a child psychology training course so they can see things better through a child's eyes and get a feel for what a hospitalized child goes through. Professionally trained child-life specialists are available in every department. Doctors, nurses and others hold seminars and psychological discussions of challenging cases, as well as sessions to deal with staff reactions to difficult patients or depressing events.

Children are prepared for all procedures not only with an explanation of what is to happen but with discussions designed to elicit the child's anxiety-producing fantasies. Doctors never make "rounds" at the child's bedside; groups of residents do separate examinations and only then discuss the case in the child's presence.

Play is not just an entertainment or distraction but an integral part of care at the center. Play therapy is used to help children express their feelings, act out their fears and anxieties, learn about their illness and maintain a sense of control over their lives.

Four-year-old John, who became mute after being admitted to the hospital last spring, was encouraged to play hospital after his drawings indicated an overwhelming sense of powerlessness. At first he hunched violently at the doll patient with a syringe and taped its mouth shut so it wouldn't ask any questions. "A child-life

specialist talked to John's doctor, parents and nurses about his need for more open communication. With their cooperation, John started talking again and gradually became more comfortable with his hospital stay.

Although the center is unusual in the extent of its focus on emotional factors, many programs to prevent the trauma of childhood hospitalization are now being introduced and tested in institutions throughout the United States.

At Brookdale Hospital in Brooklyn, for example, youngsters scheduled for surgery tour the hospital beforehand, see a television film on hospitals and surgery starring Fred Rogers of the television show "Mr. Rogers' Neighborhood," ask questions of a pediatric nurse and talk to children already in the hospital. They are told they can bring a favorite toy or object with them and even take it into the operating room.

Fear of Needles

At the University of Chicago, in Minneapolis, and at many other institutions, preoperative play therapy is used to allay children's fears of needles, gowns, masks, strangers, medical instruments and machines. Through "doctor play," the children become familiar with equipment and procedures and have an opportunity to act out their fears and fantasies as well as what they have learned about their impending hospital experience.

Hospital personnel have noted a marked improvement in the attitude and behavior of children who go through preoperative programs, and studies have shown that such children recover faster and go home sooner. Lizette Peterson-Homer, a psychologist who directs a prehospital program for children at the University of Missouri at Columbia, reported: "Children are less anxious and more cooperative if they've received good, formal preparation. They seem to cry less, cling to Mother less and suffer less."

The program at Brookdale is supported by a grant from Blue Cross and Blue Shield of Greater New York. Prehospital programs are available through 12 Blue Cross-Blue Shield plans across the United States, and more than 200 hospitals participate. Through a gift from the Warner Communications Foundation, a \$1.4-million child-life center is being created at the New York Hospital-Cornell Medical Center to provide a more natural environment for children during long or repeated hospitalizations.

At Minneapolis, emotional care begins at the front door and permeates every aspect of treatment. Children entering the 10-year-old center are greeted by brightly colored and decorated walls and carpets, big stuffed animals, personnel in street clothes and streamlined admitting procedures that get children to their rooms within 10 minutes. White walls are hard to find and white coats are nonexistent; staff members from custodians to surgeons wear smocks colored to their jobs.

The center was built with the emotional needs of children in mind. Marvin Ack, a psychoanalytic psychologist, provided the professional guidance for the physical plant and the programs and techniques. As the center's vice president for human ecology, Mr. Ack may be the highest ranking psychologist at any general hospital.

"but no experience need have a negative effect. If the child is able to master the experience, he will be better off than if he never had the experience. Coming to the hospital doesn't have to be bad."

Parents and siblings have unlimited visiting privileges and are encouraged to take part in the nonmedical care of the child. Parents of preschoolers, who find separation from parents more frightening than medical procedures, are urged to spend the night in the hospital room with their children.

Anesthesia rooms were installed outside the operating rooms so that a small child can sit on a parent's lap while the anesthetic takes effect. Often the parent will place the mask on the child's face. Children are given a choice of 12 different anesthesia "flavors" (fruit-flavored or mint-flavored lip gloss is smeared on the mask) as part of an emphasis on allowing children to maintain as much control as possible over their fate in the hospital.

"Children can be given lots of choices without compromising to medical care: Does he want the shot in the right arm or the left, which food, what time a procedure is done, how many people in the room, etc.," Mr. Ack said.

The fears and fantasies of children of various ages are routinely considered. For example, Mr. Ack said, many young children equate the phrase "put to sleep" with death (such as might happen to an old or injured pet), so anesthesia is referred to as "taking a nap." Similarly, the word "cut" is avoided because young children are very concerned about the integrity of their bodies.

'Lasting Concerns'

"We try to unearth what the child thinks is going to happen to him and what the reason for the procedure is," Mr. Ack said. "A preschool child may think his operation is punishment because he went out without his coat. A 4- or 5-year-old concerned about the integrity of his body may think surgery will leave him not as complete. For some, this becomes a lasting concern, producing a man who must always demonstrate his physical prowess or who is desperately frightened of shots."

To maintain as normal an atmosphere as possible, there is a playroom on each floor where no medical ministrations are performed. The center has its own television station through which it provides information and entertainment appropriate for a hospitalized child. Resources to educate parents are also available in every waiting room throughout the hospital. There are two sets of elevators, one reserved for very sick children and those going to and from surgery, to reduce trauma to healthy visitors and outpatients and to keep sick children from being stared at.

"What we're providing here is not Cadillac service," Mr. Ack insisted. "It's what every child requires and deserves. Unfortunately, it's not spreading around the country as rapidly as it should because initially it costs money to set up these programs, though over the long run they probably reduce costs."

He pointed out that, although more than 40 percent of the center's beds were intensive care units, the average length of stay — 5.83 days — was shorter than at all but two other children's

Dow Jones Averages

30 Ind	Open	High	Low	Close	Chg
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30 Ind	2152.25	2158.25	2148.25	2152.25	+10.00

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2 BlackD	.76	5.2	13	7084	15%	14%	1%
0% B&HPW	2.40	8.9	5	10	26%	26%	2%
5 BlairJn	1	4.2	10	122	44%	41%	4%
5 BlairRk	1.92	6.2	10	331	33	36%	3%
0 BlueB	1.80	6.5	9	357	27%	27%	2%
5 Boeins	1.40	5.9	7	3458	24%	24%	2%
5 BoiseC	1.90	7.1	10	3480	27%	26%	2%

Tables include the nationwide prices up to the closing on Wall Street.

[illegible]

Singapore

[illegible]

Sept. 22

Floating Rate Notes

Banks			Issuer-Min Cap-Mkt			Issuer-Mkt			Bld Aaskd		
Issuer-Min Cap-Mkt	24	24	24	24	24	24	24	24	24	24	24
Ashraf Kuwait 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of China 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of India 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Japan 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Korea 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of London 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Mexico 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of New York 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Paris 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Spain 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Sweden 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Switzerland 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Taiwan 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Thailand 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Tokyo 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Union 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of Vietnam 56-80	11%	24	24	24	24	24	24	24	24	24	24
Bank of West 56-80	11%	24	24	24	24	24	24	24	24	24	24
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Bank of Uganda 56-80	11%										

86	14%	1-14	100	100%
88	12 1/16	12-7	98	98 1/2
86	16%	12-24	92	—

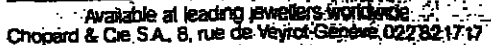
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37%	21%	Flu19B	1.20
32%	23%	P1mB	p2.12
29%	11%	P1r1sb	.60
8%	4%	P1mBac	

[illegible]

Bearer Depositary Receipts
issued by
Morgan Guaranty Trust Co. of New York

- MORGAN GUARANTY TRUST CO OF NEW YORK
- New York, 30, West Broadway
- London, 1, Angel Court
- Bruxelles, 35, avenue des Arts



174	140	Yolof	1974	14	6	1780-17	1780-17
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[illegible]

U.S. Futures Prices									
Sep. 22									
Grains									
WHEAT									
No. 1 minimum; dollars per bushel									
Dec	2.34	2.34	2.30	2.31%	-01%				
Nov	2.34	2.34	2.30	2.31%	-01%				
Oct	2.34	2.34	2.30	2.31%	-01%				
Jul	2.34	2.34	2.30	2.31%	-01%				
Jun	2.34	2.34	2.30	2.31%	-01%				
May	2.34	2.34	2.30	2.31%	-01%				
Apr	2.34	2.34	2.30	2.31%	-01%				
Mar	2.34	2.34	2.30	2.31%	-01%				
Dec	2.34	2.34	2.30	2.31%	-01%				
Prev. sales 12,000									
Prev. day's open int 30.61, at 68.									
CORN									
No. 2 minimum; dollars per bushel									
Dec	1.22	1.22	1.19%	1.19%	-01%				
Nov	1.22	1.22	1.19%	1.19%	-01%				
Oct	1.22	1.22	1.19%	1.19%	-01%				
Jul	1.22	1.22	1.19%	1.19%	-01%				
Jun	1.22	1.22	1.19%	1.19%	-01%				
May	1.22	1.22	1.19%	1.19%	-01%				
Apr	1.22	1.22	1.19%	1.19%	-01%				
Mar	1.22	1.22	1.19%	1.19%	-01%				
Dec	1.22	1.22	1.19%	1.19%	-01%				
Prev. sales 17,000									
Prev. day's open int 113.21, at 1.53.									
SOYBEANS									
No. 1 minimum; dollars per bushel									
Dec	1.44	1.44	1.41%	1.41%	-01%				
Nov	1.44	1.44	1.41%	1.41%	-01%				
Oct	1.44	1.44	1.41%	1.41%	-01%				
Jul	1.44	1.44	1.41%	1.41%	-01%				
Jun	1.44	1.44	1.41%	1.41%	-01%				
May	1.44	1.44	1.41%	1.41%	-01%				
Apr	1.44	1.44	1.41%	1.41%	-01%				
Mar	1.44	1.44	1.41%	1.41%	-01%				
Dec	1.44	1.44	1.41%	1.41%	-01%				
Prev. sales 17,000									
Prev. day's open int 69.25, at 1.29.									
SOYBEAN MEAL									
No. 1 minimum; dollars per bushel									
Dec	1.10	1.10	1.07%	1.07%	-01%				
Nov	1.10	1.10	1.07%	1.07%	-01%				
Oct	1.10	1.10	1.07%	1.07%	-01%				
Jul	1.10	1.10	1.07%	1.07%	-01%				
Jun	1.10	1.10	1.07%	1.07%	-01%				
May	1.10	1.10	1.07%	1.07%					

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Prev. 52 12.94.
Prev. 52's open 11.73, net 1,140.
Prev. day's open 11.73, net 1,140.

PORK BELLIES
100 lbs. 10.00
100 lbs. 10.00
100 lbs. 10.00

Est. sales 4.9% Prev. sales 4.0%.
Prev. day's open 11.73, net 1,140.

GOLD
100 Troy oz. 100.00
100 Troy oz. 100.00
100 Troy oz. 100.00

Est. sales 4.9% Prev. sales 4.0%.
Prev. day's open 11.73, net 1,140.

Commodity Indexes

[illegible]

London Commodities	Sept. 22	Paris' Commodities	Sept. 22	London Metals	Sept. 22	Cash Prices	Sept. 22
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[illegible]

Aug	1201	1179	1210	1212	1175	1176	Aug	1,605	1,600	1,600	1,610	+10
Aug	1264	1221	1255	1261	1225	1240	Aug	1,650	1,650	1,640	1,665	+15
Aug	N.T.	N.T.	1260	1260	1270	1280	Aug	N.T.	N.T.	1,675	1,690	+15

1204 lots of 90 tons.

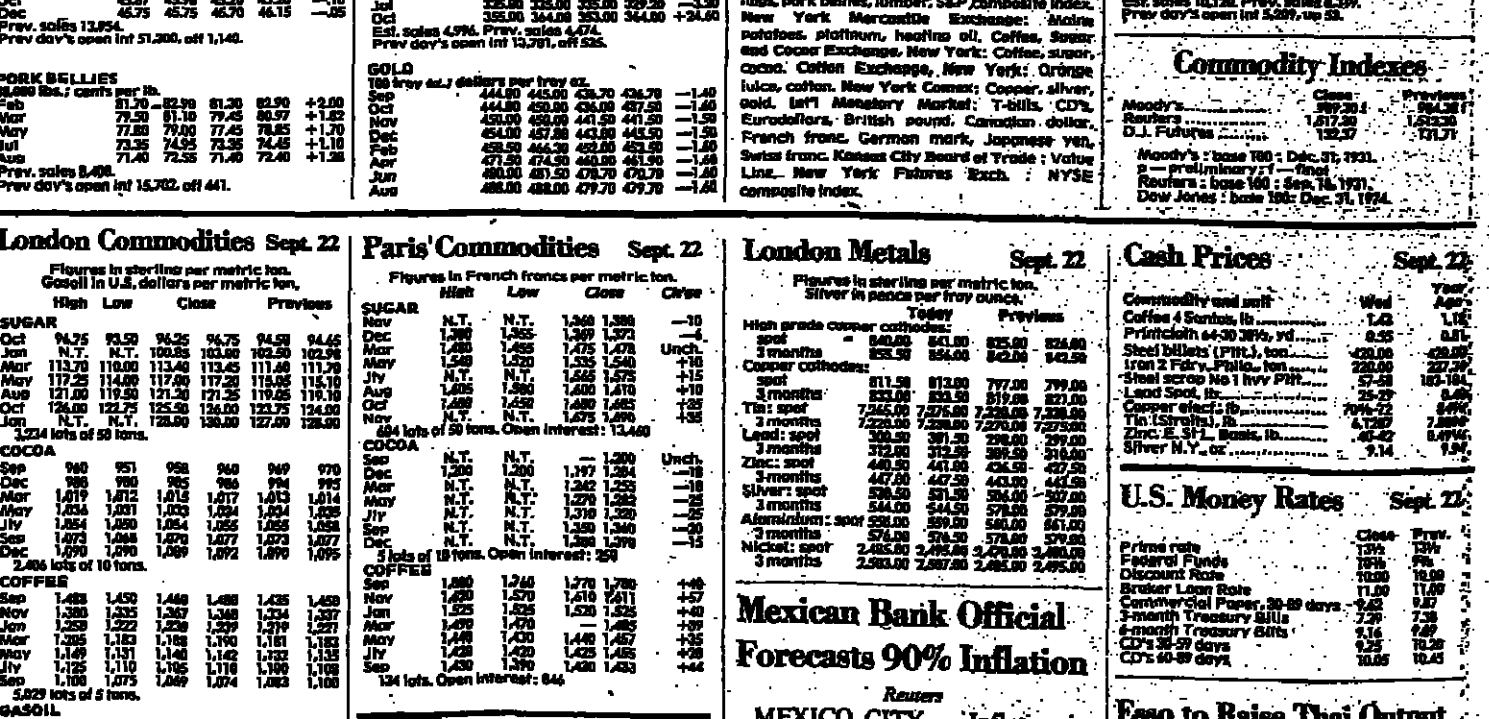
694 lots of 90 tons. Open Interest: 13,460

CCNY

3 months	853.04	815.04	797.00	Land spot, 10	25.37	0.04
This spot	724.65	727.50	728.00	Copper elect, 10	794.72	0.00
3 months	722.00	728.00	727.00	Tin (Siam), 10	6,720	2.00
Land spot	391.00	391.00	392.00	Zinc & S.P., 10 tons, 10	45.42	0.01

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Jan	N.T.	N.T.	264.50	265.00	253.00	137 1/2%	16	16.00	1.26	first eight months of the year Other observers have predicted in-
Feb	N.T.	N.T.	264.25	264.75	252.50	137 1/2%	16	16.00	1.26	
	N.T.	N.T.	264.25	264.75	252.50	137 1/2%	16	16.00	1.26	
	N.T.	N.T.	264.25	264.75	252.50	137 1/2%	16	16.00	1.26	



Dividends				Sept. 22		CITY - Irrigation in	
				USUAL		Mexico is expected to reach 90	
				Per. Annul		percent by the end of the year, ac-	
				Pay.		cording to Jesus Marcos, chairman	
				Rate		chief of the Bank of Mexico's eco-	
				1976		nomic studies department.	
				At		He said Tuesday at a meeting of	
				the		export organizations that his fore-	
				1975		cast was based on prices in the	
				1974		first eight months of the year.	
				1973		Other observers have predicted in-	
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BUSINESS BRIEFS

Bolivia Unable to Meet Loan Payment

LA PAZ — Bolivia is unable to fulfill its repayment obligations to a 128-bank consortium led by the Bank of America, according to Alfonso Revollo, the finance minister.

Mr. Revollo said Tuesday a repayment period expires in the next few days and that Bolivia is unable to meet a payment of \$40 million. Bolivia missed a payment of \$10.2 million about two weeks ago and was granted 20 days' grace by the banking consortium to pay.

Under an agreement reached by Bolivia and the banks on April 29, 1981, a total of \$450 million of foreign debt was rescheduled until August 1983.

Group Seeks U.K. Woolworth Stake

NEW YORK — F.W. Woolworth has confirmed that it is holding talks with a British merchant bank that is attempting to organize a group to purchase Woolworth's 52.6 percent holding in the British Woolworth chain.

In London, Charterhouse Japhet said Tuesday that it was the merchant bank involved but declined to identify the members of the buying group.

Woolworth in New York said only that it expects a resolution of the talks within a week. The London Stock Exchange suspended trading Tuesday in Woolworth of Britain shares because of market rumors of an imminent takeover.

Philips and AT&T Study Cooperation

EINDHOVEN, the Netherlands — Philips N.V. opened formal negotiations Wednesday with American Telephone & Telegraph Co. on the development of digital telephone and communications systems, a Philips spokesman said.

The spokesman said the formal talks followed unofficial contacts over a long period and focused on possible cooperative development of digital telephone and other communications exchanges. "It is too early to say what might be manufactured or where or how much would be involved," the spokesman said.

Lloyd's Member Is Suspended

LONDON — Lloyd's of London, the worldwide insurance syndicate, has suspended a member from its ruling committee for the first time in its nearly 300-year history.

Ian Poggart was suspended after irregularities were found in the accounts of Alexander Howden, of which Mr. Poggart is a director.

The affairs of Howden are being investigated by the Department of Trade and by London police because of information handed over Monday by a U.S. company, Alexander & Alexander Services, which took over Howden last January. The controversy is over reinsurance business that Howden allegedly placed with companies secretly controlled by some of Howden's former directors and one former chairman. Alexander said this week it had filed suit against five former Howden officers.

VW Extends Short-Time Working

WOLFSBURG, West Germany — West Germany's largest car manufacturer, Volkswagen, said Wednesday it would put workers on further short time at its six West German factories because of continuing falling orders.

A spokesman said the measures would affect approximately one-third of VW's 120,000-member work force. He said the employees would work a total of 78 further short-time days on top of the 68 days set earlier in the year.

Bethlehem to Close West Coast Mill

LOS ANGELES — Bethlehem Steel Corp. will give up steel production on the West Coast, the company has announced, shutting down its Los Angeles mill by the end of the year and putting its Seattle plant up for sale. The two plants represent about 4 percent of the company's raw steel capacity.

Compiled From Agency Dispatches

EC Orders More Cutbacks in Steel Production

The Associated Press

BRUSSELS — The European Community Wednesday predicted more hard times for the slumping steel industry and ordered cutbacks in output under an EC crisis plan.

EC Industry Commissioner Edouard Davignon said steel consumption in the 10 member countries would drop to 24.1 million tons in the final quarter of the year, 3.4 million tons less than in the year-earlier period.

The EC steelmakers, moreover, will be able to export only about 5 million tons of steel, 2.3 million tons less than in the final quarter of 1981, Mr. Davignon said.

He predicted that widespread losses by European steelmakers would continue into 1983 and warned that without cuts in production to match falling demand prices would hurt the entire industry.

"The reality of these figures will have to be taken into account," Mr. Davignon told reporters. "It's clear that in this situation one has

New Offerings Of Eurobonds Top \$500 Million

LONDON — Dresser Industries, United Technologies and GMAC Overseas Finance led a number of issuers to the Eurobond market Wednesday as a total of more than \$500 million in paper was issued.

United Technologies is issuing \$100 million of 12½ percent, seven-year Eurobonds at par; the issue is led by Goldman Sachs International. Dresser is offering a \$75-million, seven-year issue, led by Credit Suisse First Boston, priced at 99½ and carrying a coupon of 12¼ percent.

GMAC Overseas Finance is raising 100 million Deutsche marks through a five-year issue led by Deutsche Bank, bond market sources said. The issue carries a coupon of 8½ percent, with par pricing, and is guaranteed by General Motors Acceptance Corp.

Ontario Hydro is issuing \$200 million of 12½ percent, 10-year bonds priced at 99½; Deutsche Bank is the lead manager. Japan Development Bank will issue a \$75-million, seven-year Eurobond. The issue, led by Morgan Guaranty and guaranteed by the Japanese government, will carry a 12¼ percent coupon and be priced at par.

More Banks Join Loan for France

PARIS — Société Générale said Wednesday that four more banks have agreed to participate in the 10-year Euromarket loan for France, raising the amount underwritten to \$5.6 billion.

A reply from one other bank was still being awaited. If it is positive, the amount subscribed will total \$5.7 billion, almost 50 percent more than the \$4-billion target announced by the French government last week.

The latest acceptances included Bank of America and Manufacturers Hanover Trust, which raised the number of U.S. underwriters to eight. Canadian banks now total four with Orion Royal Bank joining Bank of Montreal, Toronto Dominion and Bank of Nova Scotia. The number of West German underwriters also expanded to four with Westdeutsche Landesbank joining Commerzbank, Deutsche Bank and DG Bank.

to pay close attention to price trends."

Under the crisis plan, cuts will be made in production of hot rolled coil, uncoated sheet, galvanized sheet, merchant bars, quarto plate and heavy sections. Quotas for wire rod and reinforcing bars were untouched.

If the current trend continues, the annual rate of steel production in the EC will be less than 100 million tons, compared to 155 million in 1974. That would be the lowest total since the European Coal and

Steel Community was formed in 1952.

Mr. Davignon said the slump was attributable to the continuing development of substitutes for steel and a worldwide recession in which there is less demand for automobiles and other manufactured goods.

In the past four years, 150,000 jobs have been lost in the EC steel industry. In Britain, where the biggest cutback has been registered, the work force has dwindled to 81,000 from 165,000 in 1978.

Money Funds Throw Scare Into U.S. Banks

(Continued from Page 15)

investments. The fear is that the fund's investors might withdraw their money if they see that the fund is holding a CD of a bank that had recently encountered problems.

There are 400,000 investors in Shearson/American Express money market mutual funds who make their investments through 4,200 brokers, said Jeffrey B. Lane, senior executive vice president of the corporation, which runs a number of funds, including the \$6.4-billion Shearson Daily Dividend Fund. "I don't want to have to convince the 4,200 brokers that the bank's CD is good, it's not worth my time," he said.

It is this kind of attitude that is troubling many officials and bankers. They argue that because of the vast size of some of the money market mutual funds, their managers should consider the effect of their actions on the financial markets as well as the short-term interests of their clients.

Most money fund managers do not agree. "You have \$200 billion of assets floating around, that's no small matter," Mr. Lane acknowl-

edged. "But we are not being paid to take risks, be diplomats or heroes. We want our customers to sleep well."

Even those who are deeply concerned about the impact of the money funds on the market concede that the fund managers' first responsibility is to their investors.

"I've felt for a long time that we'd be better off if we had a smaller money market mutual fund industry," said J. Charles Partee, a governor of the Federal Reserve Board. "I've always thought of the funds as being personal investors with no continuing relationships that they want to preserve. They represent total self-interest — I wouldn't expect anything else from them."

International Herald Tribune ads work

U.S. Asks Vote Delay

The U.S. Commerce Department has asked the International Trade Commission to postpone its final vote on whether the domestic steel industry has been harmed by European competition, a ruling that could lead to import duties. Reuters reported from Washington. In a letter to the ITC chairman, Alfred Eckes, Commerce Undersecretary Lionel Olmer said talks are under way aimed at resolving the trade dispute between Europe and the U.S.

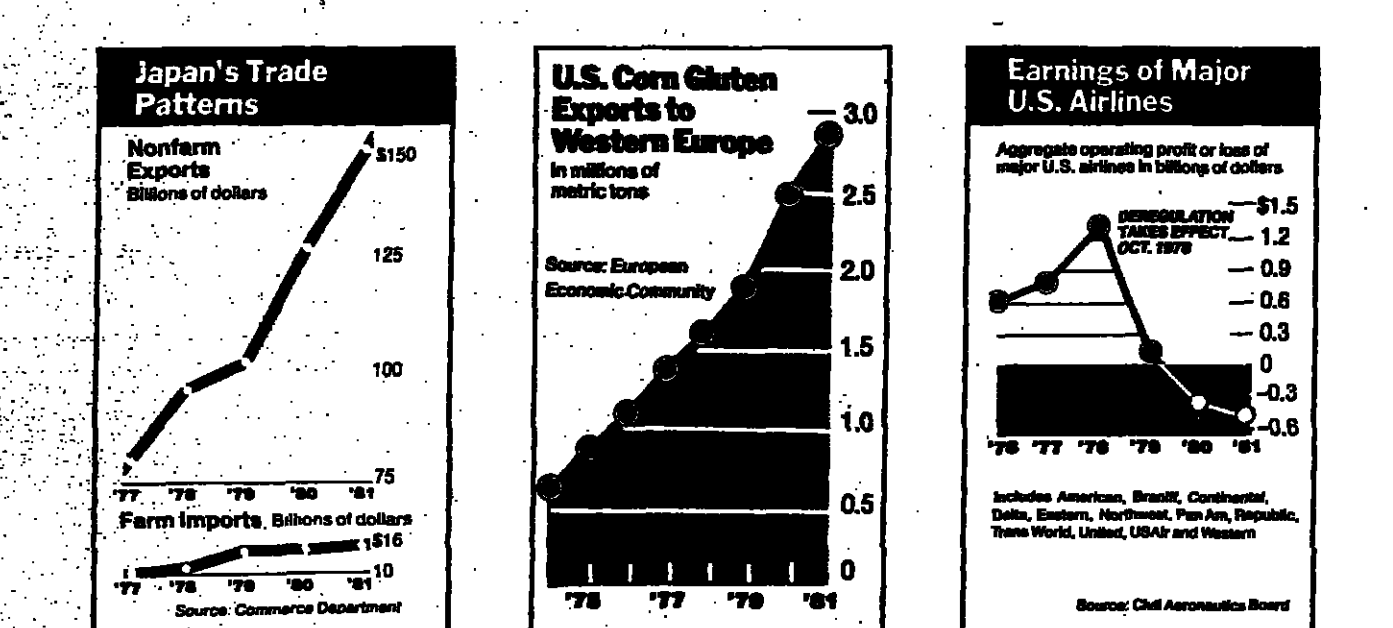
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Atlantic Capital Corporation

Banca Commerciale Italiana

Bank of America International Limited

Bank Mees & Hope NV

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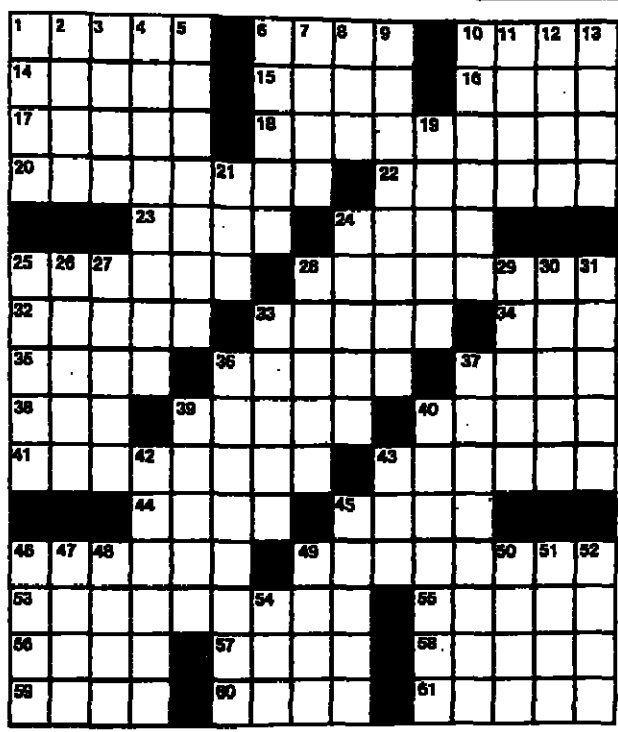
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world's tallest
building |
| 14 " — gift is
from —":
James 1:17 | 56 Pianist Gilels | 25 Rockefeller
Center statue |
| 15 Italian river | 57 Explorer
Hedin | 26 Net |
| 16 Elliptical | 58 Societal
character | 27 Tire pattern |
| 17 Gracefully
draped
garments | 59 "Darn!" | 28 Become
innervated |
| 18 Like Salome | 60 Jane
Rochester, née | 29 Honor piously |
| 20 Disquisition | 61 Former
vocalist for
Erskine
Hawkins | 30 Successor to
surgeant? |
| 22 Needing to be
taken to the
cleansers | DOWN | 31 Sir Patrick of
belladry |
| 23 Kind of bag | 1 Boundless | 33 "Watch on the
—" |
| 24 Ego | 2 Constructional
piece | 36 Break in a dike |
| 25 "Blue book"
family | 3 Center | 37 Impel |
| 26 No, no, no, no | 4 Balbo,
Mitchell, Post
et al. | 38 Issues |
| 32 — Haute | 5 What a spa
might do | 40 Harness-hard-
ware maker |
| 33 Sphere | 6 Outmoded | 42 Ultimates |
| 34 Party mixture | 7 What Daphne
became | 43 Period |
| 35 Twists the
truth | 8 Conjunction | 45 Tantrum |
| 36 Circumspect | 9 Dipterous
insect | 46 Marina mole |
| 37 Cornus irritant | 10 Recurring
themes | 47 Madame
Bovary |
| 38 Literary
oddmans | 11 Baseness | 48 Rod for a roast |
| 39 Actors Blore
and Fleming | 12 Wash | 49 Say it is so |
| 40 "Judith"
actress: 1965 | 13 Kane's
"Rosebud" | 50 Tennis great,
for short |
| 11 Dregs | | 51 Fight endings,
actual |
| 13 Overfond
lovers | | 52 Actual
existence |
| 14 Half gainer,
e.g. | | 54 — League |

WEATHER

	HIGH			LOW				HIGH			LOW		
	C	F	F	C	F	F		C	F	F	C	F	F
ALGARVE	31	88	98	64	Cloudy		LOS ANGELES	30	86	99	64	Cloudy	
ALBUQUE	28	82	94	48	Cloudy		MADRID	34	75	95	64	Fair	
AMSTERDAM	16	61	79	30	Fair		MANILA	32	79	95	77	Overcast	
ANKARA	23	73	8	46	Storms		MEXICO CITY	24	73	95	65	Fair	
ATHENS	27	81	16	61	Fair		MIAMI	30	86	94	73	Sigma	
AUGUSTA	27	81	32	101	Cloudy		MOSCOW	27	77	95	64	Cloudy	
BANGKOK	34	93	26	79	Storms		MONTREAL	19	46	5	41	Cloudy	
BEIRUT					N.A.		MOSCOW	16	61	10	59	Fair	
BERLIN	21	75	13	65	Overcast		MUNICH	18	64	13	55	Fair	
BOSTON	16	61	12	54	Cloudy		MURKIN	27	77	95	64	Cloudy	
BRAZEL	16	61	8	46	Cloudy		NEWDEHLI	35	95	23	73	Overcast	
BUCHAREST	24	75	50	75	Cloudy		NEWYORK	17	18	13	55	Rain	
BUDAPEST	17	20	18	44	Cloudy		OSAKA	27	77	95	64	Cloudy	
Buenos Aires	15	59	8	46	Cloudy		OSLO	15	59	8	46	Cloudy	
CAIRO	32	98	28	68	Fair		PARIS	17	63	8	46	Cloudy	
CAPE TOWN	27	81	16	61	Fair		PEKING	22	75	15	59	Fair	
CASABLANCA	25	77	20	68	Cloudy		PRAGUE	27	77	95	64	Cloudy	
CHICAGO	16	61	4	26	Fair		REYKJAVIK	6	46	-1	30	Fair	
COPENHAGEN	26	71	11	52	Fair		RIO DE JANEIRO	21	78	12	54	Cloudy	
DALLAS-FORT WOL.	23	73	17	61	Fair		ROME	25	78	22	72	Overcast	
DANESBURG	26	79	73	43	Fair		SANTO DOMINGO	19	64	12	54	Cloudy	
DUBLIN	12	54	5	41	Cloudy		SEOUL	26	79	15	59	Fair	
EDINBURGH	16	61	28	12	Cloudy		SHANGHAI	24	75	20	68	Cloudy	
FLORENCE	28	82	16	61	Fair		SINGAPORE	31	88	27	81	Overcast	
FRANKFURT	17	63	13	55	Overcast		STOCKHOLM	11	32	11	32	Cloudy	
GENEVA	28	88	16	61	Fair		SYDNEY	17	63	13	55	Cloudy	
HARARE	23	73	17	61	Fair		TAIPEI	27	81	24	73	Rain	
HLSINKI	16	61	15	59	Fair		TEL AVIV	30	86	22	72	Fair	
HONG KONG	29	84	24	75	Cloudy		TOKYO	27	81	24	73	Fair	
HOUSTON	27	81	50	80	Cloudy		TUNIS	27	81	23	72	Cloudy	
ISTANBUL	27	79	79	79	Fair		VENICE	25	73	17	63	Fair	
JERUSALEM	25	77	17	63	Fair		VIEDNA	27	77	33	55	Fair	
LAS PALMAS	26	75	29	48	Cloudy		WAWAW	24	75	27	68	Overcast	
LIMA	22	57	14	54	Cloudy		WASHINGTON	19	46	10	59	Rain	
LONDON	21	70	18	61	Cloudy		ZURICH	18	64	15	59	Overcast	
LONDON	14	61	5	41	Overcast								

Readings from the previous 24 hours.

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SEPTEMBER 20, 1992

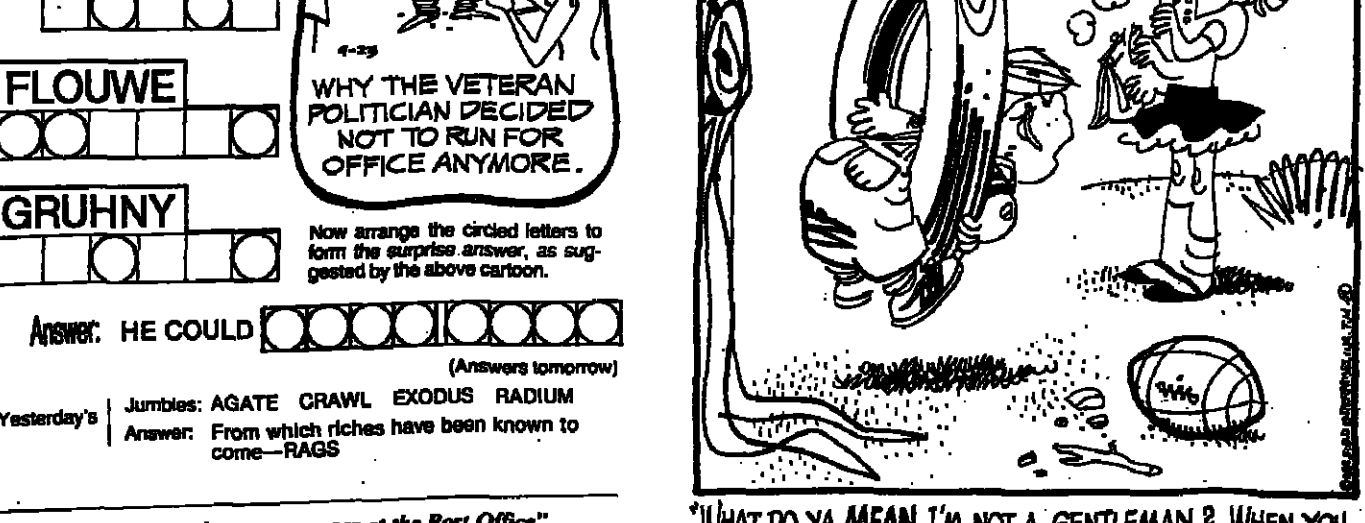
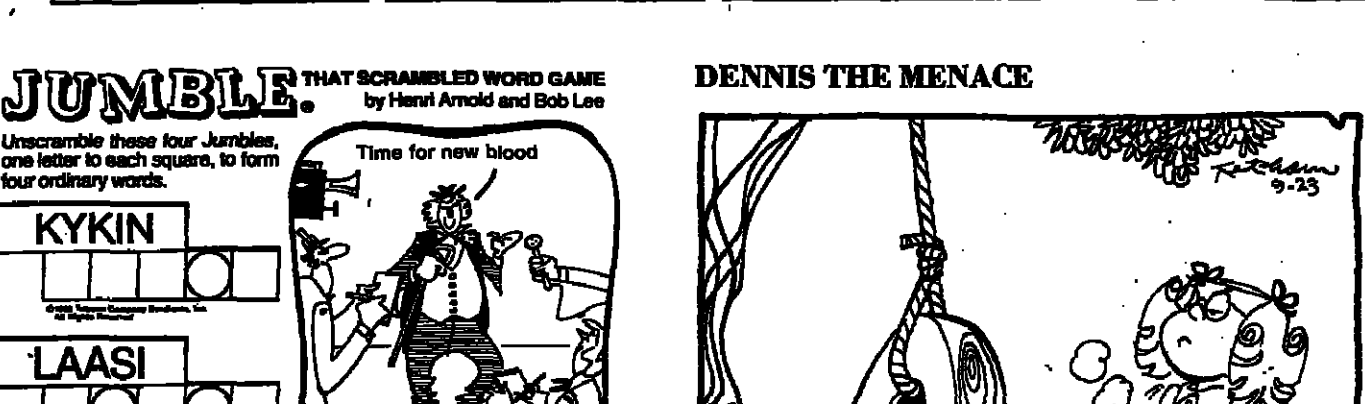
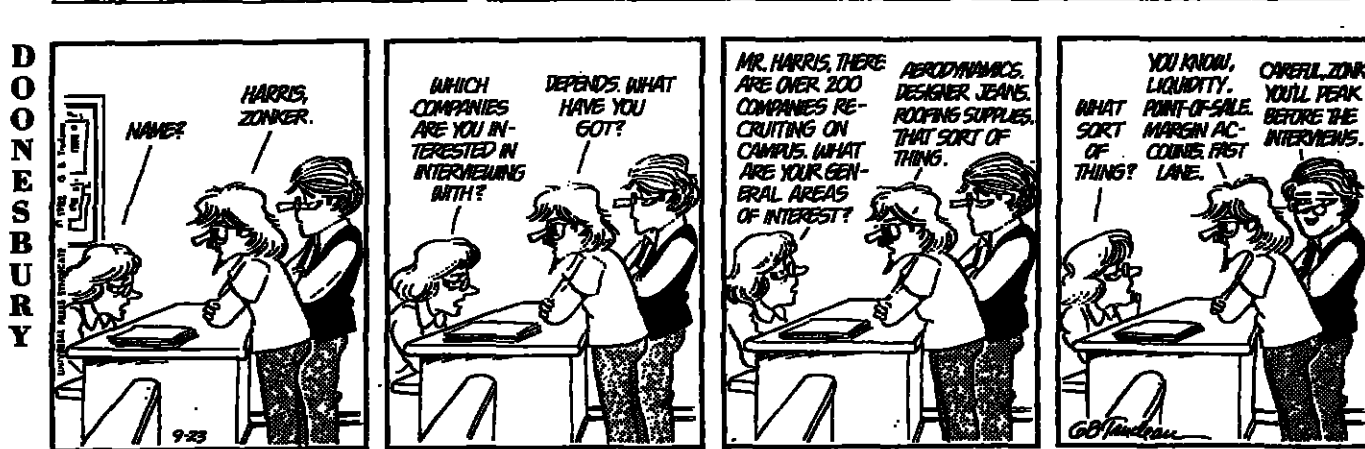
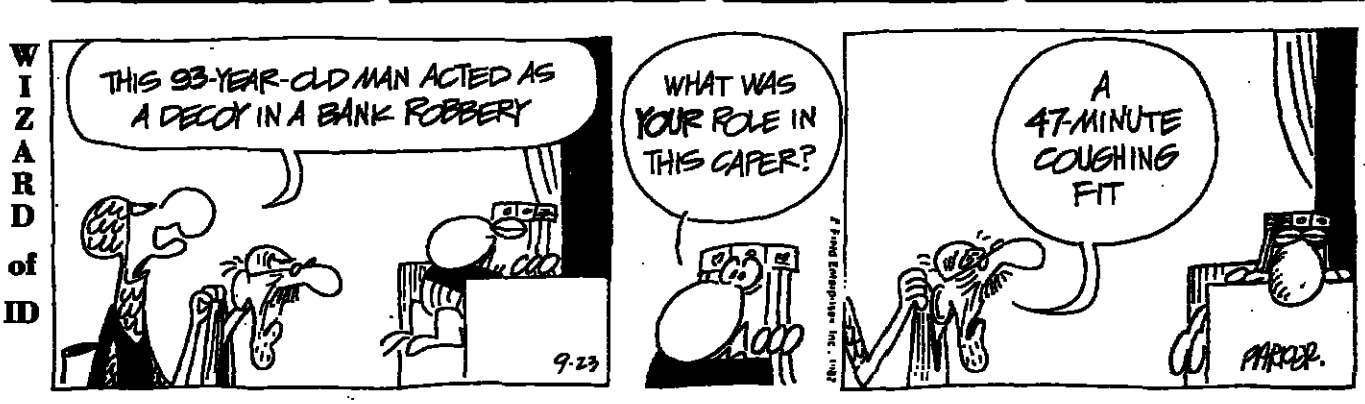
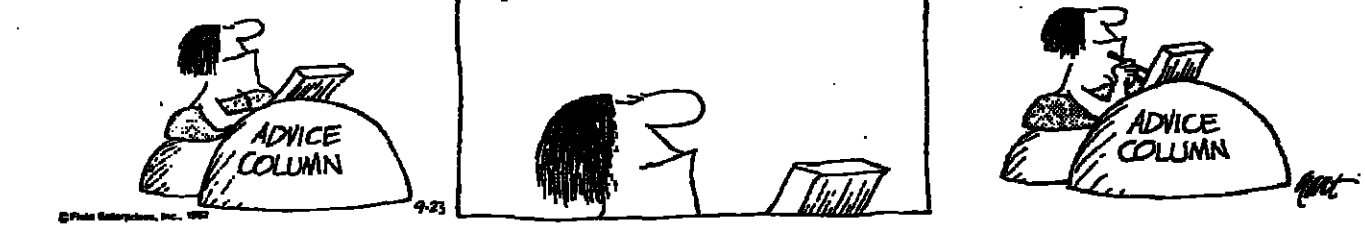
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[illegible]

B. *Dear Fort Board,*
C.

what is the proper way to
eat Corn on the Cob in
Public?

ANY WAY BUT NUDE



MONSIGNOR QUIXOTE

*By Graham Greene. 221 pp. \$12.95.
Simon & Schuster, 1230 Avenue of the Americas, New York 10020.
The Bodley Head Publishers, 9 Bow St., Covent Garden, London E5.95.*

Reviewed by Frederick Busch

ONE opens "Monsignor Quixote" (to quote Greene on another writer) "with all the excitement that comes from complete confidence in the author." The confidence is rewarded: this is a witty, often funny, and very moving novel. It is not made gray by the donnism of some of its lesser novels ("The End of the Affair," "A Burnt-Out Case"); this one is Greene with a vigorosity of storytelling pleasure, and with an author's excitement over right characterization. He is at his best in this novel, and he knows it. I could feel him feeling so, probably against his will, as he wrote. That knowledge communicates itself to the reader, page by page and chapter by chapter. And by the time Father Quixote was blowing up condoms like balloons in the bordello to which his latter-day Sancho had taken him, I was laughing out loud.

Quixote, of La Mancha, an aging and comfortable parish priest, knows that he is descended from Don Quixote. While his bishop, who detests the unorthodoxy and zest in him, insists that a man cannot be descended from a character in fiction, the father quietly refers to Cervantes as "the biographer" of his ancestor. His Sancho Panza, the recently defeated peasant knight mayor of El Toboso, is named Zancas, which was the surname of the original Sancho Panza in Cervantes' truthful history." Quixote of course calls his moribund beloved Seat car "my Rocinante," after the first Quixote's horse. And that is the set of assumptions, offered from the start, with which this sweet novel begins. With two important exceptions, it is told, though in the third person, with the tone, and frequently the words, of Quixote's thinking. A peasant who is a priest and who is (nearly by accident) elevated to the rank of monsignor, Father Quixote thinks about his faith. His voice is the novel's, and Greene is never patronizing—one hears the book as one hears the voice of a simple, decent, and thoughtful man.

When he is made monsignor, the father takes a leave and embarks with Sancho on a wandering pilgrimage through contemporary Spain, toward and away from his doubts. The first, effortless chapter commences occasions for talk and more talk — about Sancho's forlorn Marxism and Quixote's earnest Catholicism, — and provides a frame for tales and picaresque adventures, as well as lovingly wrought bibulousness. Never has wine been so well-appreciated in recent fiction. As the original Quixote loved outdated books of chivalry, so Sancho loves a Marxism that cannot be left behind. He fills out Quixote's faded books "with a few of chivalry too, Saint John of the Cross, Saint Teresa, Saint Francis de Sales." These two lovers of failed or neglected books of love drink and discuss their way across the crisscrossing paths of cruel Guardia and disapproving church. They offer us important sad decisions: that "religion is the Valium of the poor"; that a white Roman collar may look "like a handkerchief signaling distress"; that the man who possesses complete belief lacks "the dignity of despair"; their speculations on birth control as related to moral theology are worthy of Hamlet's nurse; and are worth the price of admission.

The analogy to "Don Quixote," while used to propel the adventures in our minds, is not that heavily leaned upon by Greene. And it does not merely enchant. It serves to remind us that fact and fiction are not always easy to separate: a Trappist monk, who offers refuge to our heroes, says, "Fact or fiction — in the end you can't distinguish between them — you just have to choose." Faith could be such a fictional process, Greene thinks, and could be indulged. He writes, "God is not in us, not about ease in faith, but about the pain of doubt — intelligent religion, not mere mining of prayers."

Thus, the complaisant Quixote, who can say he wants others to believe because "I want them to be happy," reasons that "the believer will

fight another believer over a shade of difference; the doubter fights only with himself." He reveals himself more and more, as the novel

Solution to Previous Puzzle

RISK	VIGOR	LOFT
ANTI	INONE	ASIA
STAR	ANTIC	USSR
PRISM	STOA	ROTS
SORTIE	ENLAI	
ENTER	LATHES	
MANNERED	AZURE	
OLAF	ELATE	WILE
SMILE	MACHETES	
SALKAL	MOTEL	
GRACE	ORCHID	
ORES	SOMA	SHEAR
PORT	SPURS	INTO
ALDA	ESNES	OBRR
HEAD	DEGAS	PIOS

BRIT

By Alan Truscott

ON the diagrammed deal, East

After the pull of three hearts, West raised to five diamonds. This was an accurate save, for the penalty would be a mere 300. Unwilling to accept this, North not unreasonably tried five hearts. Now East judged that her two aces made a successful defense likely, and produced a surprising penalty double.

The defense had to be accurate to defeat five hearts. West led his singleton diamond club, and when the king was played from dummy, East dropped the nine, a suit preference signal for spades.

The declarer tried the heart finesse and West won. He shifted to the spade queen, and East won with the

progresses, to be the doubter of whom he speaks. It becomes clear that while Quixote's love of God never diminishes, it is also true that "when I speak of belief, I become aware always of a shadow, the shadow of disbelief haunting my belief." In a stunning scene that is at once hilarious and sad, Quixote hears the confession of an undertaker, who has stolen the brass handles from a dead priest's coffin, while the father sits, hand before his eyes, on the seat of a toilet in the compartment of a men's room in a bar: "He thought, 'I didn't say the right words. Why do I never find the right words? The man needed help, and I recited a formula. God forgive me.'"

God might, but the church and state will not. Quixote is kidnapped by the church whose efficacy he doubts and whose mandates he embarrasses. (The scene in which Sancho looks for him, and meets English-speaking tourists, is very funny and touching.) The state is often Quixote and Sancho too, and we have seen the Guardia in deftly noted moments, more and more clearly menacing them. We feel actual threat accumulating, and when the title journey becomes headlong flight, it feels like suitable action because Greene has made us feel that Quixote is born to be hunted and God man is born to be hunted a good man — "O God, make me human, let me feel temptation. Save me from my indifference — is bound to be brought down by such a world as this."

Unlike the father, Greene has fellowship. He is human. But the women in this novel — as if by magic, Greene, turned priest, were himself renouncing them — are either literary (*Don Quixote's Dulcinea*), saintly (*Theresa*), or splendid incidental peasants (the father's housekeeper *Teresa*, who serves up horsemeat steaks as aged beef). Strong women of flesh and blood are absent, and it strikes me that Greene is comfortable with the absence. In his last novel, "Dr. Fischer of Geneva," Anna-Louise, the narrator's wife, died early in the book, her hours of life on the page were rather unconvincing anyway. In the novel before that, "The Human Factor," Maurice surrenders everything for Sarah and then must leave her behind. And in "Monsieur Quixote," the central woman, not dead or deserted of necessity, is simply never present: she lives in the word of the church and the minds of believers as a saint. If Greene's personae are traditionally stripping the life of flesh from themselves, his genius is not — this novel has absolutely as much about the body of the world as it needs, and its lean and simple language offers us an amplitude.

The novelist, a doubting Catholic, declares his art to be free. And the novel, of course, from here on, is about a contest between Quixote and his fate. What occurs, Greene reminds us, about writing, is that you can't tell. Greene works hard — as in his public statements about his fiction — to remind us that he is not writing propaganda for a church, or a literary source. He is concerned with how, in such darkness, the search for honest belief takes place. He makes his character work because of the story the father descends from. He then teaches us about writing as an art and story as its servant: by making Quixote master of the story in which he began.

The end of the novel must remain between you and Graham Greene. You needn't bother to reread Cervantes' "Don Quixote" before you read this novel. But do read this novel. So it is. The end is up to you: aren't amazed by how effortlessly Greene makes the obvious into something new, and the unlikelyst event into a real and plausible occasion.

And those "balloons" in that bedroom? The good father reads himself to sleep with the "prophet Marx," and he sleeps the whole night through. He is wrapped in darkness and wakened to fight by the master, whom you ought to see at work and, most happily for us, very much at play. I don't know when he's been better. He is Rembrandt, with laughter

Frederick Busch's most recent novel is "Take This Man." A new novel, "The Outlaw Jew," will be published in the spring. He wrote this review for The Washington Post.

Sex Education Book Halted

The Associated Press

NEW YORK — St. Martin's Press, publisher of the children's sex-education book "Show Me!" has stopped distribution because of a U.S. Supreme Court ruling upholding a law barring use of children in sexually explicit photographs, regardless of whether they are judged obscene. The book, first published in West Germany in 1974, contains photographs of nude children. St. Martin's said it feared they could be interpreted as violating the law.

DGE

NORTH(D)
 ♠9753
 ♥8863
 ♦—
 ♣KJ1082

WEST
 ♠Q73864
 ♥K102
 ♦Q432
 ♣6

EAST
 ♠A8
 ♥7
 ♦AJ10885
 ♣9753

SOUTH
 ♠K2
 ♥AQJ54
 ♦K76
 ♣AQ4

North and South were vulnerable.
 The bidding:

North	East	South	West
Pass	3♦	3♥	5♦
5♥	Dbl.	Pass	Pass

